

THE CONVULVULACEAE OF THE LESSER ANTILLES

DULCIE A. POWELL

THIS STUDY of the Convolvulaceae comprises 58 species in 10 genera native to or naturalized in the islands of the Lesser Antilles, extending from Anguilla in the north to Grenada in the south. Specimens are cited only in cases of new records for the area and for a new species, *Evolvulus antillanus*. Descriptions have all been prepared from actual specimens, except in the few instances where none was available, and then a note is made to that effect.

Common ornamentals are included in the Keys, and a short section on cultivated taxa is given at the end.

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CONVOLVULACEAE

Annual or perennial, twining or prostrate plants, erect shrubs, or occasionally trees. Leaves alternate, rarely stipulate, simple, entire or lobed, or palmately compound. Flowers axillary, solitary or in cymes, bracteate; aestivation induplicate, exposed portions of bud thickened and forming a star in open flower, imbricate in *Cuscuta*; sepals (4 or) 5, usually free, imbricate, equal or unequal, persistent; petals (4 or) 5, joined, limb entire or lobed, generally actinomorphic, usually showy; stamens alternating with corolla lobes, inserted near the base of the corolla tube (except in *Cuscuta*), usually flattened and bearing glandular hairs at their bases; ovary often surrounded by disc, superior, with 1 to 4 locules, usually 2, the ovules axile, erect, the style(s) 1 or 2. Capsule dehiscent by valves, circumscissile, splitting irregularly, or indehiscent; seeds usually 4, glabrous or hairy.

KEY TO THE GENERA OF CONVULVULACEAE IN THE LESSER ANTILLES

1. Plants parasitic; stem yellow or orange; leaves reduced to scales. 1. *Cuscuta*.
1. Plants autotrophic, with green leaves.
 2. Herb or undershrub, not twining; styles 2. 2. *Evolvulus*.
 2. Shrub or usually a twining or trailing vine; style 1.
 3. Flowers small and numerous, borne in large, creamy white panicles; a cultivated woody climber. *Porana paniculata* Roxb.
 3. Flowers not very small, or if small, not borne in large panicles.
 4. Stems and leaves bearing branched trichomes, especially when young.
 5. Stigmas filiform. 3. *Convolvulus*.
 5. Stigmas not filiform. 4. *Jacquemontia*.
 4. Plants with simple trichomes or glabrous.
 6. Pollen spiny; corolla not bright yellow in species known (see *Ipomoea* no. 17).

- 7. Fruits ellipsoid, circumscissile, mostly 1-seeded; flowers white with dark centers, borne in clusters. . . 10. *Turbina*.
- 7. Fruits globose or subglobose, not circumscissile, seeds more than 1; flowers if white not borne in clusters.
- 8. Fruits valvate. 8. *Ipomoea*.
- 8. Fruits indehiscent.
- 9. Sepals and lower leaf surfaces with glandular dots. 9. *Stictocardia*.
- 9. Sepals, lower leaf surfaces, and stems with dense, white tomentum; heavy vine; cultivated.
. *Argyrea nervosa* (Burman f.) Bojer.
- 6. Pollen smooth; flowers frequently yellow.
- 10. Leaves simple, entire, narrowly elliptic. 5. *Aniseia*.
- 10. Leaves palmately divided or lobed, or broadly ovate.
- 11. Stems and peduncles often winged; exocarp separating as an operculum. 7. *Operculina*.
- 11. Stems and peduncles wingless (except occasionally in *M. umbellata*); capsule thin walled, with no operculum. 6. *Merremia*.

1. **Cuscuta** Linnaeus, Sp. Pl. 1: 124. 1753.

Total parasites, herbaceous, twining, attached to host by haustoria; stems orange or yellow, shining-smooth, brittle, containing clear latex. Leaves reduced to a few scales. Flowers small, white or cream, in crowded cymes; bracts present; perianth pentamerous in West Indian species; sepals united, free above; petals united, free above; stamens inserted on rim of corolla tube, with a fimbriate scale borne below each one; ovary bilocular, each cell containing 2 ovules, the styles 2 (in West Indian species), with capitate stigmas. Fruit a thin-walled capsule, sometimes circumscissile; seeds (1–)4.

LECTOTYPE SPECIES: *Cuscuta europaea* L.

KEY TO THE SPECIES OF CUSCUTA

- 1. Capsule not opening by circumscission, the greater part exposed at maturity.
 - 2. Flowers wider than long, the sepal lobes rounded, overlapping at base. 3. *C. campestris*.
 - 2. Flowers longer than wide, the sepal lobes acute, not overlapping. 5. *C. indecora*.
- 1. Capsule opening by circumscission, the greater part covered at maturity.
 - 3. Stems coarse, growing mostly on shrubs; calyx and corolla lobes much shorter than the tubes.
 - 4. Flowers 3–4 mm. long; capsule usually 2-seeded. 4. *C. globulosa*.
 - 4. Flowers 2 mm. long; capsule usually 1-seeded. 1. *C. americana*.
 - 3. Stems slender, growing mostly on herbs; calyx and corolla lobes about equal to, or longer than, the tubes.
 - 5. Calyx and corolla lobes with irregular margins, rounded, with a horn-like projection at the apex. 2. *C. boldinghii*.
 - 5. Calyx and corolla lobes entire, acute. 6. *C. umbellata*.

1. *Cuscuta americana* L. Sp. Pl. 1: 124. 1753.

Cuscuta surinamensis Schilling, Descr. Pl. Leprae, 60, 200. *pl.* 2. 1778.

Cuscuta graveolens H.B.K. Nov. Gen. Sp. 3: 122 (96 in folio ed.). 1818 [1819].

Nemepis americana (L.) Raf. Fl. Tellur. 4: 91. 1838.

?*Nemepis prolifera* Raf. *ibid.*

?*Dactylepis brownei* Raf. *ibid.* 125.

?*Eronema robinsoni* Raf. *ibid.*

Cuscuta spectabilis Choisy, Mém. Soc. Hist. Nat. Genève 9: 283. *pl.* 5, *fig.* 1. 1842.

Cuscuta leiolepis Miq. Linnaea 18: 247. 1844.

Cuscuta congesta Bentham, Bot. Voy. Sulphur, 138. 1845.

Cuscuta campanulata Nutt. ex Engelmann, Trans. Acad. St. Louis 1: 482. 1859.

Cuscuta americana L. var. *congesta* Progel in Martius, Fl. Brasil. 7: 376. 1871.

Cuscuta americana L. var. *spectabilis* Progel in Martius, *ibid.* 377.

COMMON NAMES. Teigne, vermicelle (St. Barts); love vine (St. Martin, St. Eustatius, Saba); vermicelle, corde à violon, herbe z'amitié, herbe à z'amourelle, herbe à z'amourette (Guadeloupe); vermicelle, corde de violon, liane à cordon, liane sans fin, herbe à z'amourette (Martinique); love vine (Barbados).

Stems medium to coarse. Flowers sessile to subsessile, congested, about 2 mm. long, drying straw-brown to black; calyx about as long as the corolla tube, the sepals joined to form a deep, campanulate tube lobed only near the top, the lobes overlapping below, rounded at the apex; corolla lobes shorter than the tube, erect, obtuse; filaments very short; stigmas capitate, exserted. Capsule ovoid-globose, circumscissile, bearing the persistent withered corolla as a crown; seed usually 1.

GENERAL DISTRIBUTION. Tropical America; most common in the West Indies.

DISTRIBUTION IN LESSER ANTILLES. Anguilla, St. Martin, St. Barts, Saba, St. Eustatius, St. Kitts, Nevis, Antigua, Montserrat, Guadeloupe, Dominica, Martinique, Barbados, St. Vincent, Bequia, Carriacou, Ronde, Grenada.

2. *Cuscuta boldinghii* Urban, Repert. Sp. Nov. 16: 38. 1919.

Cuscuta partita Boldingh, Fl. Nederl. W.-Ind. Eil. 326. 1913, non Choisy, 1842.

Cuscuta ceratophora Yuncker, Illinois Biol. Monogr. 6: 118. *figs.* 29, 72. 1921.

Stems slender, bearing very compact, isolated clusters of sessile or subsessile flowers, turning somewhat black on drying. Flowers 3–4 mm. long; calyx equal to or longer than the corolla tube, sepals united only at the base; corolla lobes upright or slightly spreading, about equal to the corolla tube in length; petals and sepals slightly denticulate, rounded at the tops, with apical or subapical, hornlike projections; stigmas globose, the styles

sturdy, longer than the ovary. Capsule circumscissile, bearing the withered corolla on top.

GENERAL DISTRIBUTION. Mexico, Central America, West Indies.

DISTRIBUTION IN LESSER ANTILLES. Grenada.

3. *Cuscuta campestris* Yuncker, Mem. Torrey Bot. Club 18: 138. 1932.

?*Cuscuta americana* Hooker, Fl. Bor.-Am. 2: 77. 1840 [1837], non Linnaeus, 1753.

Cuscuta pentagona Engelman var. *calycina* Engelman, Am. Jour. Sci. Arts 45: 76. 1843.

Cuscuta arvensis Engelman in Gray, Man. Bot. 336. 1856, p. p., non Beyrich, 1838.

Cuscuta arvensis Engelman var. *calycina* Engelman, Trans. Acad. St. Louis 1: 495. 1859.

?*Cuscuta arvensis* Engelman var. *capsici* Degen & Linhart, Zeitschr. Pflanzenkrank. 17: 269. 1908.

Cuscuta pentagona Engelman var. *subulata* Yuncker, Am. Jour. Bot. 10: 3. 1923, p. p.

COMMON NAMES. Liane z'amitié, liane vermicelle (Guadeloupe and Martinique).

Stems slender. Flowers pedicellate, borne in numerous small clusters, 2–3 mm. long, wider than long; calyx as long as corolla tube, the lobes rounded, overlapping at base; corolla lobes reflexed, acute, about as long as the tube or longer, sometimes verrucose on the outside; stamens and fimbriate scales pointing inward toward styles; intrastylar opening conspicuous; persistent calyx and corolla not enclosing the depressed-globose capsule.

GENERAL DISTRIBUTION. Cosmopolitan.

DISTRIBUTION IN LESSER ANTILLES. Guadeloupe, Marie Galante, Martinique. Where *Polygonum* occurs, it is a favorite host of this *Cuscuta*.

4. *Cuscuta globulosa* Benth, Bot. Voy. Sulphur, 138. 1845, non Boissier, 1856.

Cuscuta americana L. var. *spectabilis* Yuncker, Illinois Biol. Monogr. 6: 124. 1921, p. p.

COMMON NAMES. See *Cuscuta americana*.

Stems coarse. Flowers 3–4 mm. long, subsessile to shortly pedicellate, drying straw-yellow; calyx about as long as the corolla tube, the sepals joined to form a deep, campanulate tube, lobed at the top, the lobes rounded at the apex, overlapping at the base; corolla lobes erect, obtuse, shorter than the corolla tube; filaments very short; stigmas capitate, exerted. Capsule depressed-globose, circumscissile, bearing the persistent withered corolla as a crown; seeds usually 2.

GENERAL DISTRIBUTION. Mexico, West Indies.

DISTRIBUTION IN LESSER ANTILLES. St. Barts (*vide* Questel), Montserrat, Martinique, St. Vincent.

Cuscuta globulosa is very closely related to *C. americana*. When dry, the lighter color of its larger and fewer flowers is in marked contrast to those of *C. americana*, as is the shape of the capsule, which varies with the number of seeds. However, intermediate forms are to be found that make the distinction questionable at the species level. The response of these species and intermediate forms to host plants might prove to be a very rewarding study.

Both species are robust and occasionally produce straight flowering shoots that do not twine and that bear no haustoria.

5. *Cuscuta indecora* Choisy, Mém. Soc. Hist. Nat. Genève 9: 278. *pl.* 3, *fig.* 3. 1842.

Cuscuta verrucosa Engelm. var. *hispidula* Engelm., Am. Jour. Sci. Arts 43: 341. 1842.

Cuscuta hispidula (Engelm.) Engelm., *ibid.* 45: 75. 1843.

Cuscuta neuropetala Engelm. var. *minor* Engelm., Boston Jour. Nat. Hist. 5: 223. 1845.

Cuscuta porphyrostigma Engelm., *ibid.*, in synon.

Cuscuta decora Engelm., Trans. Acad. St. Louis 1: 501. 1859.

Cuscuta decora var. *indecora* Engelm., *ibid.* 502.

Cuscuta parviflora Engelm. var. *vestita* Progel in Martius, Fl. Brasil. 7: 386. 1871.

Epithymum indecorum (Choisy) Nieuwland & Lunell, Am. Midl. Nat. 4: 511. 1916.

Cuscuta indecora Choisy var. *hispidula* (Engelm.) Yuncker, Illinois Biol. Monogr. 6: 148. 1921.

Stems slender. Inflorescence papillose, usually elongate, with several flowers; pedicels longer than flowers; calyx shorter than corolla tube, the lobes acute, not overlapping at the base; corolla about 3 mm. long, fleshy, the lobes blunt or acute, outspread and with incurved tips in mature flowers. Capsule globose, ca. 4 mm. across.

GENERAL DISTRIBUTION. Tropical America.

DISTRIBUTION IN LESSER ANTILLES. Barbados.

6. *Cuscuta umbellata* H.B.K. Nov. Gen. Sp. 3: 121 (95 in folio ed.). 1818 [1819].

Stems very slender. Flowers about 2 mm. long, pedicellate; calyx lobes acute, reaching up to the top of the corolla tube or longer; corolla lobes acute, about as long as the corolla tube or longer, reflexed, exposing the stamens and pistils; pistils longer than the ovary. Capsule depressed-globose, very fragile, somewhat exposed.

GENERAL DISTRIBUTION. Tropical America.

DISTRIBUTION IN LESSER ANTILLES. Saba (*vide* Boldingh), Antigua (*vide* Engelmann, Yuncker), Guadeloupe.

Boldingh (1909, 1913) reported this species from Saba, but Yuncker (Mem. Torrey Bot. Club 18: 237. 1932) did not mention having examined any West Indian specimen except a Wulschlaegel collection from Antigua, which he listed under *Cuscuta umbellata* var. *desertorum* Engelmann (Trans. Acad. St. Louis 1: 488. 1859) as Engelmann had done, observing that the specimen had immature capsules. According to Yuncker, the specimen had capsules that are more exposed and glandular and flowers that are broader than is typical for this variety. This raises the question as to whether Wulschlaegel's collection was in fact *C. campestris*.

It seems, therefore, that the distribution of *Cuscuta umbellata* in the Lesser Antilles is little known; the species does occur throughout the Greater Antilles.

Judging from material studied, *Cuscuta umbellata* is often very floriferous in the United States and Mexico, whereas West Indian material is much more vegetative, its relatively few flowers and fruits (with extremely thin calyx, corolla, and capsules) being obscured by its own stems and the foliage of the host plant. Members of the Portulacaceae and Amaranthaceae are the most frequent host plants for the species throughout its range. A striking resemblance between *C. umbellata* and the Argentinian *C. membranacea* Yuncker, added to their similar hosts, suggests that the latter species belongs here, the circumscission of its capsules being a factor of age.

2. *Evolvulus* Linnaeus, Sp. Pl. ed. 2. 1: 391. 1762.

Herbs, undershrubs, or shrubs, prostrate to erect, more or less hairy, the appressed trichomes essentially malpighiaceous, the patent hairs simple. Leaves small, simple, entire. Flowers axillary or terminal; bracts 2, at base of pedicel; sepals 5, free, equal or subequal; corolla rotate, funnel or salver shaped, small, usually blue or white, subentire or 5-lobed, the middle of each lobe hairy on the outside; stamens 5, filaments filiform, anthers ovate to linear; ovary glabrous or occasionally pilose, 1- or 2-celled, ovules 4, styles 2, each bifid, stigmas long, filiform. Capsule globose or ovoid, 4-valved, (1- to) 4-seeded; seeds smooth or minutely verrucose, glabrous.

LECTOTYPE SPECIES: *Evolvulus nummularius* L.

KEY TO THE SPECIES OF EVOLVULUS

1. Plants prostrate; leaves oblong to subrotund, base sometimes cordate or subcordate.
 2. Stems anchored at nodes; hairs simple, not appressed; bracts borne in leaf axil; corolla distinctly lobed. 5. *E. nummularius*.
 2. Stems anchored by taproot, only occasionally rooting at nodes; hairs appressed; flowers pedicellate and pedunculate, not lobed. 3. *E. convolvuloides*.

1. Plants usually ascending or upright; leaves ovate, elliptic, or linear, base never cordate or subcordate.
 3. Plants not sericeous.
 4. Leaves ovate; flowers ca. 1 cm. across; cultivated.
 *E. tenuis* Martius ex Choisy subsp. *longifolius* (Choisy) Ooststr.
 4. Leaves elliptic or linear; flowers less than 1 cm. across.
 5. Leaves elliptic, 2 or 3 times as long as wide; stems villose.
 1. *E. alsinoides* var. *grisebachianus*.
 5. Leaves linear or elliptic, much longer than wide; stems strigose.
 4. *E. filipes*.
 3. Plants sericeous, at least on undersides of leaves.
 6. Flowers pedunculate and pedicellate. 2. *E. antillanus*.
 6. Flowers without peduncles. 6. *E. sericeus*.

1. *Evolvulus alsinoides* (L.) L. var. *grisebachianus* Meissner in Martius, Fl. Brasil. 7: 344. 1869.

Evolvulus diffusus Chapman, Fl. So. U. S. 345. 1860.

Suberect to trailing herb, branching at ground level; stems villose. Leaves shortly petiolate, elliptic, up to 15 mm. long and 8 mm. wide, apex mucronate or abruptly acute, the hairs appressed, often denser on the lower surface. Peduncles filiform, longer than the subtending leaves, bearing 1 (to several) flowers; pedicels 3–5 mm. long; calyx villose, the sepals 2–3 mm. long, ovate-lanceolate, acuminate; corolla blue or lavender, ca. 5 mm. wide, rotate, lobed. Capsule ca. 3 mm. across, straw colored; locule 1, with fragmentary septum; seeds 4.

GENERAL DISTRIBUTION. Tropical America.

DISTRIBUTION IN LESSER ANTILLES. St. Martin, Barbados.

2. *Evolvulus antillanus* Powell, sp. nov. FIGURE 1, a.

Evolvulus argyreus sensu auct., non Choisy, 1837; Ooststr. Monogr. Gen. *Evolvulus*, 80. 1934, p. p., excl. type.

COMMON NAMES. Lin, lin bâtard (Martinique).

Herbae. Caules pauci vel multi, parvi et prostrati vel suberecti et trahentes usque 50 cm. longi, tenaces, sericei, vetustiores glabrescentes. Folia conferta, duplo longiora quam lata, fulvo-sericea in plantis prostratis, vel in plantis suberectis non conferta, 5-plo longiora quam lata, cinereo-sericea, breviter petiolata (petiolo trichomis obscuro), apice acuta, 5–12 mm. longa, \pm 2 mm. lata, anguste oblongo-elliptica vel late elliptica, utrinque sericea, sed interdum in plantis majoribus supra glabrescentia; costa subtus prominente. Flores axillares, pedunculati, plerumque solitarii; pedunculus sericeus, folio subtento brevior vel longior; bracteae 2, aciculares, 1–2 mm. longae, apice pedunculi persistentes; pedicellus 3–7 mm. longus, sericeus; sepala 5, sericea, imbricata, ca. 3 mm. longa, duo exteriora lanceolata, acuta, tres interiora ovata, apice acuta, in partibus inferioribus inclusis margine scarioso, interdum puncta pellucida visa; co-

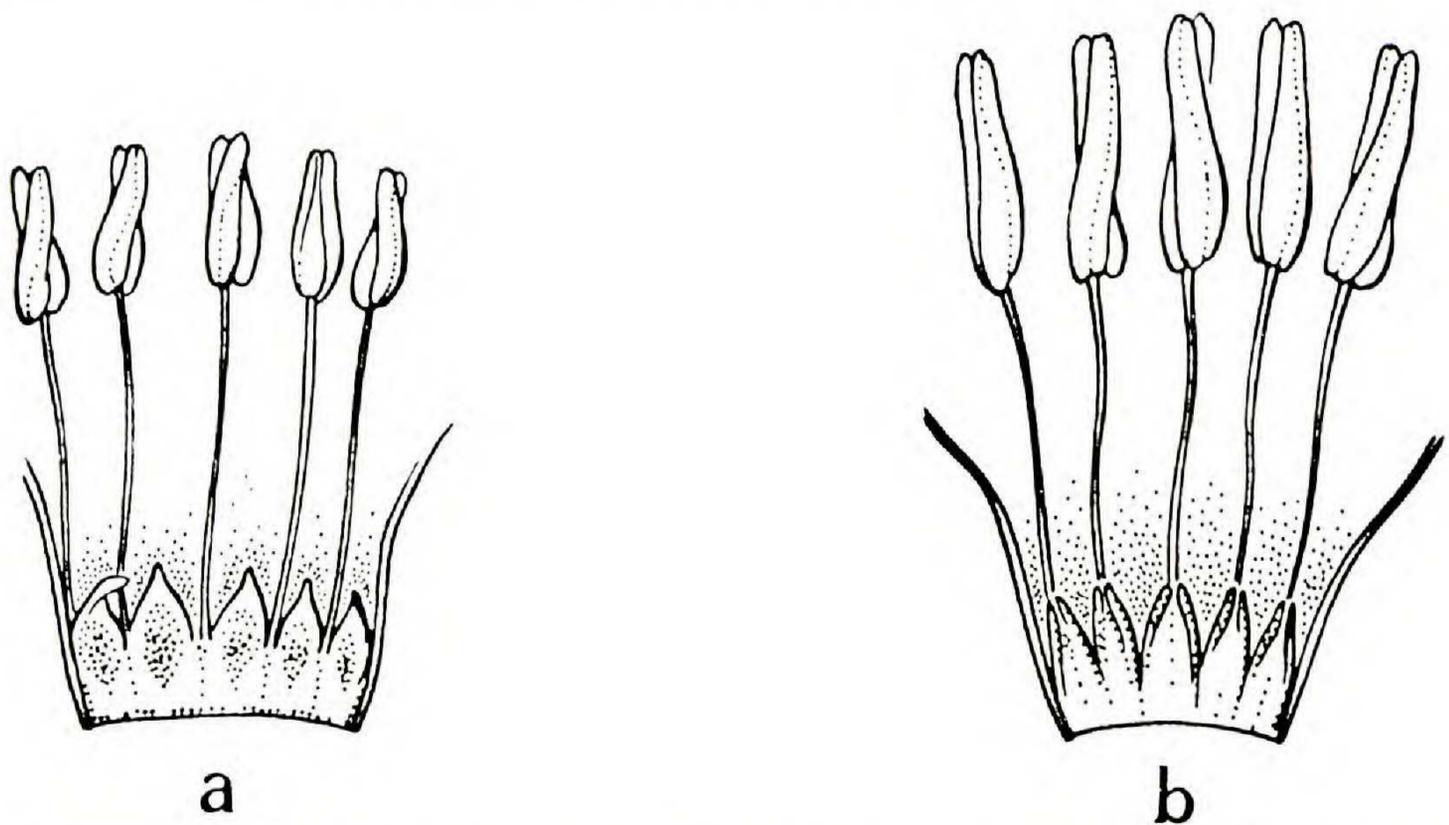


FIGURE 1. Lower portion of corolla tube opened and spread to show stamens and outgrowths, $\times 12$: a, *Evolvulus antillanus*; b, *Evolvulus argyreus*.

rolla rotata cremeo-alba vel azurea, a basi ad marginem 5–6.5 mm. longa, extus sericea ad plicas; stamina paulo super basin corollae inserta; filamentum ± 2 mm. longum, anthera filamento 2-plo brevior plerumque torta; pollinis grana laevia; 5 cuspes breves infra corollae tubum inter filamentorum bases et eisdem alternantes triangulares sursum et introrsum projectae (interdum junctae) cucullum tholiformem super ovarium facientes; styli 2, filiformes superne in ramos longos filiformes 2 divisi; ovarium 1-loculare vel incomplete 2-loculare, ovula 4. Fructus glaber, globosus, stramineus, capsularis 4-valvatus, 2–3 mm. diametro; semina 4 vel minus, brunnescentia, glabra.

Prostrate or suberect herb; stems few to many, sericeous to glabrescent with age. Leaves 5–12 mm. long, ca. 2 mm. wide, narrowly oblong, elliptic, or broad-elliptic, fulvous- to gray-sericeous, sometimes glabrescent on the upper surface in larger plants, midrib prominent on lower surface. Flowers usually solitary; peduncle shorter or longer than subtending leaf; pedicel 3–7 mm. long; sepals sericeous, ca. 3 mm. long; corolla about twice as long, white or blue, the tube with 5 short, triangular cusps between the bases of the filaments, alternating with them, projecting upward and inward (sometimes joining) over the ovary; ovary 1- or incompletely 2-celled, ovules 4. Capsule globose; seeds 4 or fewer.

SPECIMENS EXAMINED. (St. Martin: *Boldingh* 3371 cited under *E. argyreus* is also cited under *E. sericeus* (*Boldingh*, 1909, p. 160)). Antigua: near English Harbour, *Rose, Fitch, & Russell* 3356 (US, type). Barbuda: Lignum Vitae Trail, Box 625 (GH, US). Guadeloupe: littoral madréporique, falaises, Pointe des Châteaux, *Stehlé* 2810 (US); Côte sous le Vent, *Baillif, H. & M. Stehlé* 5939 (US). Martinique: Ste. Anne, calcaires des pétrifications falaises littorales xérophiles, alt. 10 m., *H. Stehlé* 2304 (US); pelouses xérophiles, Le Marin, sud de l'île sur sol parsemé de bois silicifiés, 30 m., *H. & M. Stehlé* 3676 (GH, US); pelouses

xéro-héliophiles, Le Diamant, sud de l'île, alt. 40 m., *H. & M. Stehlé* 3692 (US); pelouses xérophytiques littorales de sud, Anses d'Arlet, alt. 15 m., *H. & M. Stehlé* 4382 (US); mornes salines, falaises madréporiques, alt. 24 m., *H. & M. Stehlé* 6177 (A, US), *Hahn* 1136 (US); environs de fort de Fort de France, *Hahn* 1336 (GH). **St. Lucia:** volcanic sea-cliffs at Marquis Bay, 20–200 ft., *Proctor* 17559 (A); sea cliffs, 50 ft., Port Dauphin, *Sturrock* 499 (A). **Curaçao:** rocky hills, Wacao to Playa Grande, *Britton & Schafer* 3037 (US).

Evolvulus antillanus occurs in Curaçao and probably also in neighboring Venezuela. In fact, *Curran & Haman* 527 from northern Venezuela seems to belong to this species, but because the material at hand is sterile, the evidence is inconclusive.

Several flowers examined had incompletely fused ovaries, the four valves separating at the apex. This may have been partly due to pressing, but no fresh or preserved material has been available for study.

In his monograph of the genus *Evolvulus*, van Ooststroom (Meded. Bot. Mus. Utrecht 14: 80–82. 1934) placed certain collections of West Indian material with some from South America in the species *E. argyreus* Choisy because, in his opinion, there was no distinct difference between the specimens. However, additional collections from the Lesser Antilles show that the specimens from this area are, in fact, distinct from the South American species, and we are here describing them as the new species *Evolvulus antillanus*.

Small plants of both species are remarkably alike with their crowded, fulvous, sericeous leaves. Larger plants show less similarity: the leaves of *Evolvulus argyreus* are twice as wide; the plant is more foliaceous and less wiry; the flowers are larger and of a deeper blue than those of *E. antillanus*. Material from St. Lucia is even more distinct, having gray indumentum and a more pronounced trailing habit. On the lower leaf surfaces of *E. antillanus*, unlike those of the other species, only the midrib is discernible. Near the base of the corolla tube, five triangular cusps arising at the same level as, and alternating with, the stamens, curve inward to form a dome-shaped hood over the ovary, whereas in *E. argyreus* (FIGURE 1, b) there are typically two narrow flaps produced on the corolla tube below the level of each stamen and converging at its base; these two flaps sometimes join tips to form a tooth opposite the stamen, and always reach up to the base of the stamen rather than beyond. They do not form a hood over the ovary. This condition (as in *E. argyreus*) has also been observed in *E. tenuis* Martius ex Choisy, in *E. arizonicus* A. Gray, in *E. incanus* Pers., and sometimes in *E. convolvuloides* (Willd. ex Schultes) Stearn. The habitats of the two species also differ: *E. argyreus* typically grows between 1000 and 3000 meters altitude in South America; *E. antillanus*, on dry West Indian coastland.

3. *Evolvulus convolvuloides* (Willd. ex Schultes) Stearn, *Taxon* 21: 649. 1972.

Nama convolvuloides Willd. ex Schultes, *Syst. Veg.* 6: 189. 1820.

Evolvulus nummularius sensu auct. non L. 1762.

Evolvulus hirsutus sensu auct. non Lam. 1789.

Evolvulus glaber Sprengel, Syst. Veg. 1: 862. 1824.

Evolvulus mucronatus Sw. ex Wikström, Sv. Vet.-Akad. Handl. 61. 1827.

Evolvulus glabriusculus Choisy, Mém. Soc. Hist. Nat. Genève 8: 78. 1837.

Majera coerulea Karsten ex Peter in Engler & Prantl, Nat. Pflanzenfam. 4(3a): 19. 1897.

Evolvulus karstenii Peter in Engler & Prantl, *ibid.*

Evolvulus campestris Brandegee, Univ. Calif. Publ. Bot. 6: 190. 1915.

COMMON NAME. Teigne (Guadeloupe).

Prostrate to trailing herb, arising from taproot, rarely rooting at the nodes, with appressed hairs or sometimes glabrescent. Leaves shortly petiolate; blade subrotund, oblong to obovate, 0.5–2.5 cm. long, 0.3–1.6 cm. wide, midrib and primary veins often prominent, upper surface glabrous or with few appressed hairs, lower surface with appressed hairs, the apex rounded or retuse (very occasionally somewhat acute), mucronate, the base rounded or subcordate. Peduncles shorter to longer than subtending leaves, usually 1-flowered; bracts 1–3 mm. long, linear, persistent; pedicels 2–4 mm. long; calyx pilose to glabrous, the sepals lanceolate, 2–4 mm. long, apex acute to acuminate; corolla pale blue or white, 8–10 mm. in diameter, pilose to glabrous on the outside, rotate, sometimes bearing 5 pairs of narrow flaps at the base within, each pair converging up to the base of a stamen; stamens attached ca. 1/6 height of corolla; ovary 1-celled, ovules 4. Capsule ovoid to globose, with a slightly pointed apex; seeds 4 or less.

GENERAL DISTRIBUTION. Tropical America.

DISTRIBUTION IN LESSER ANTILLES. Anguilla, St. Martin, St. Barts, St. Kitts (*vide* van Ooststroom), Antigua, Guadeloupe, La Désirade, Marie Galante, Martinique, St. Lucia, St. Vincent, Cannouan, Carriacou, Ronde, Mustique, Barbados (*vide* van Ooststroom), Grenada.

4. *Evolvulus filipes* Martius, Flora Beibl. 1841, Band 2, 100. 1841.

Evolvulus linifolius sensu auct. non L. 1762; Duss, Ann. Inst. Colon. Marseille 3: 442. 1897.

Evolvulus exilis Meissner in Martius, Fl. Brasil. 7: 342. t. 123, fig. 1. 1869.

Evolvulus saxifragus Martius var. *paraensis* Meissner in Martius, *ibid.* 343.

Evolvulus nanus Meissner in Martius, *ibid.* 346.

Evolvulus filipes Martius var. *exilis* (Meissner) Chodat & Hassler, Bull. Herb. Boiss. II. 5: 684. 1905.

COMMON NAME. Herbe grise (Martinique).

Semi-erect to decumbent herb, sparsely substrigose with appressed hairs; main stem frequently much branched, arising from a taproot. Leaves short petiolate to sessile, lanceolate to linear, up to 25 mm. long and 5 mm. broad, becoming smaller toward the top of the plant, midrib prominent beneath, very sparsely strigose to glabrous above, sparsely strigose

to glabrescent beneath, backward arm of each hair (on stem and leaf) very short or missing. Inflorescences sometimes branched; flower(s) 1 to several per peduncle; peduncle filiform, pilose, usually 2–2.5 cm. long and almost upright, considerably longer than the leaves; pedicels about as long as calyx; sepals sparsely pilose and ciliate, ca. 2 mm. long, ovate, acute at apex, green in flower, slightly accrescent and turning brown in fruit; corolla very small, slightly longer than calyx, blue; ovary 2-celled, ovules 4. Capsule globose, 2 mm. in diameter; seeds 4.

GENERAL DISTRIBUTION. Mexico to South America, Jamaica, Lesser Antilles.

DISTRIBUTION IN LESSER ANTILLES. Martinique, Grenada.

5. *Evolvulus nummularius* (L.) L. Sp. Pl. ed. 2. 391. 1762.

Convolvulus nummularius L. Sp. Pl. 157. 1753.

Evolvulus veronicaefolius H.B.K. Nov. Gen. Sp. 3: 117 (92 in folio ed.). t. 215. 1818 [1819].

Evolvulus reniformis Salzm. ex Choisy, Mém. Soc. Hist. Nat. Genève 8: 72. 1837, in synonym.

Evolvulus domingensis Sprengel ex Choisy, *ibid.*, in synonym.

Evolvulus capreolatus Martius ex Choisy, DC. Prodr. 9: 445. 1845, in synonym.

Evolvulus dichondroides Oliver, Trans. Linn. Soc. 29: 117. t. 78B. 1875.

?*Evolvulus repens* Parodi, Contr. Fl. Paraguay, Fasc. 1: 29. 1877.

Evolvulus nummularius (L.) L. var. *grandifolia* Hoehne, Anex. Mem. Inst. Butantan Bot. 1(6): 39. 1922.

COMMON NAMES. Véronique (Guadeloupe); teigne, ti teigne, petite véronique, véronique bord de mer (Martinique).

Prostrate herb rooting at nodes; stems pilose with patent, crooked hairs. Leaves petiolate, petiole channeled above; blade oblong-elliptic to subrotund, 5–15 mm. long, 4–14 mm. wide, usually with pellucid dots, midrib and primary veins (3 to 5 pairs) prominent on the lower surface, with or without hairs, usually glabrous on the upper surface, hairs more numerous on midrib and veins on the lower surface, apex rounded to retuse, base rounded to cordate. Flowers solitary, lacking peduncle, sometimes crowded on short flowering branches; bracts 2 in leaf axil at base of pedicel; pedicel 2–4 mm. long, lengthening and becoming reflexed in fruit; calyx green, often tinged purple, the sepals ca. 3 mm. long, equal, ovate to oblong with acute tip, with pellucid dots and conspicuous midrib; corolla white, occasionally pale violet, 8–10 mm. in diameter, distinctly 5-lobed, sparsely pilose on outer surface of star; ovary 1-celled, ovules 4. Capsules brown or purple, 4-valved but splitting irregularly, conical to globose, slightly beaked; seeds 1 or 2, shape of fruit varying with number of seeds.

GENERAL DISTRIBUTION. Mexico to northern Argentina, West Indies, tropical Africa, Madagascar, India.

DISTRIBUTION IN LESSER ANTILLES. St. Barts, Antigua, Guadeloupe,

Îles des Saintes, Marie Galante, Désirade, Dominica, Martinique, St. Lucia, Barbados, Carriacou, Grenada.

6. *Evolvulus sericeus* Swartz, Prodr. 55. 1788 (as *Evolvulus*).

Evolvulus sericeus Sw. var. β Desr. in Lam. Encycl. Méth. Bot. 3: 538. 1792.

Convolvulus proliferus Vahl, Eclog. 1: 18. 1796 [1797].

Evolvulus sericeus Sw. var. *Commersoni* Pers. Syn. Pl. 1: 288. 1805.

Evolvulus angustissimus H.B.K. Nov. Gen. Sp. 3: 116 (91 in folio ed.). 1818 [1819].

Evolvulus Commersoni (Pers.) Schultes, Syst. Veg. 6: 197. 1820.

Evolvulus virgatus Willd. ex Schultes, *ibid.* 198.

Convolvulus Commersonii Desr. ex Steudel, Nomencl. Bot. ed. 2. 1: 408, 621. 1840, in synonym.

?*Evolvulus brevipedicellatus* Klotzsch in Schomb. Versuch Fauna Fl. Brit. Guiana, 1153. 1848, *nomen nudum*.

Evolvulus sericeus Sw. var. *latior* Meissner in Martius, Fl. Brasil. 7: 353. 1869.

Evolvulus anomalus Meissner in Martius, *ibid.*

Evolvulus alsinoides L. var. *sericeus* (Sw.) Kuntze, Rev. Gen. Pl. 2: 441. 1891.

Evolvulus sericeus Sw. forma *glabrata* Chodat & Hassler, Bull. Herb. Boiss. II. 5: 685. 1905.

Evolvulus sericeus Sw. var. *angustifolius* Hoehne, Anex. Mem. Inst. Butantan Bot. 1(6): 42. 1922.

Evolvulus sericeus Sw. var. *loefgrenii* Hoehne, *ibid.*

COMMON NAME. Herbe argentée (Guadeloupe).

Low, wiry herb; stems few or several, upright or ascending, sericeous, 10–30 cm. long. Leaves linear or lanceolate, acute at apex, 5–30 mm. long, 3–8 mm. wide, sericeous on lower surface, usually glabrous above, midrib depressed above and prominent beneath, with one pair of primary veins in wider leaves. Flowers solitary or occasionally few; peduncle lacking; bracts in leaf axil; pedicel short; sepals equal, ovate, acuminate, usually with spreading tips, 3–5 mm. long, ciliate, sericeous outside and sometimes inside above; corolla white, rotate or wide funnel shaped, 7–12 mm. wide. Capsule globose, bilocular; seeds 4.

GENERAL DISTRIBUTION. Southern United States to Argentina, West Indies.

DISTRIBUTION IN LESSER ANTILLES. Anguilla, St. Martin, St. Barts, St. Eustatius, Antigua, Guadeloupe, Désirade, Dominica.

3. *Convolvulus* L. Sp. Pl. 153. 1753; Gen. Pl. ed. 5. 76. 1754.

Herbs or shrubs, twining, prostrate or erect, glabrous or hairy, the hairs simple or branched. Leaves usually entire. Flowers solitary, in axillary cymes or in terminal heads; bracts variable, persistent; sepals persistent; corolla funnel shaped or campanulate, white, blue, pink, purple, or yellow; stamens included, pollen smooth; style 1, stigmas 2, filiform, ovary 2-celled, ovules 4. Capsule 4- or 8-valved; seeds 4 or fewer, 3-angled with 2 sides flat and 1 convex, glabrous or pubescent, often rough.

LECTOTYPE SPECIES: *Convolvulus arvensis* L.

Convolvulus nodiflorus Desr. in Lam. Encycl. Méth. Bot. 3: 557. 1792.

Ipomoea verticillata sensu L. Plantarum Jamaicaensium Pugillus, 9. Nov. 1759, non L. Syst. Nat. ed. 10. 924. May–June, 1759.

Jacquemontia nodiflora (Desr.) G. Don, Gen. Syst. 4: 283. 1838 [1837?].

Jacquemontia simulata House, Bull. Torrey Bot. Club 33: 314. 1906.

Woody vine, pubescent with short, 3-armed hairs or glabrescent. Petiole up to 2.5 cm., usually \pm 1 cm. long; blades entire, ovate, up to 6 cm. long, pubescent or glabrate, the base cordate, subcordate, truncate, or very slightly cuneate (Grenada specimens), with the sides tending to be subequal, the apex usually acute or acuminate, mucronate. Inflorescences pedunculate, peduncles usually shorter than subtending petioles; flowers many and crowded to few or occasionally solitary; bracts small, pubescent, persistent; pedicel(s) less pubescent or glabrous, less than 1 cm. long; sepals rounded or obtuse at apex, scarious on edges, 2–3 mm. long, glabrous or pubescent; corolla white, wide funnel shaped, flaring from the base, slightly or distinctly lobed, 11–14 mm. long; stamens included; stigma bilobed, filiform, exserted when mature. Capsule ovoid, 3–4 mm. high, splitting into 4 and then into 8 valves; seeds 4 or fewer, brown, glabrous, ruminant, narrowly winged on the margins.

GENERAL DISTRIBUTION. West Indies, South America.

DISTRIBUTION IN LESSER ANTILLES. St. Martin, St. Barts, Guadeloupe, Martinique, St. Lucia, Barbados, St. Vincent, Cannouan, Grenada.

4. **Jacquemontia** Choisy, Mém. Soc. Hist. Nat. Genève 6: 476. 1834.

Perennial or annual vines, prostrate herbs, or shrubs; stems usually somewhat woody, with many branches, pubescent, with trichomes typically branched. Leaves simple, often bearing minute glandular dots. Peduncles usually longer than the subtending petioles; calyx variable; corolla blue, lavender, white, or occasionally reddish, entire or lobed, with convolvulaceous star prominent; stamens and pistil often exposed; pollen smooth; style 1; stigmas 2, not filiform. Capsule bilocular, valves 8 or fewer (tardily dehiscent?), brown outside, lighter inside and shining, the septum dark brown, opaque, shining, slightly uneven; seeds 4, glabrous, verrucose or ruminant, minutely areolate, often winged on the margins, with 3 sides, 2 flat and 1 convex.

TYPE SPECIES: *Jacquemontia azurea* (Desr.) Choisy.

KEY TO THE SPECIES OF JACQUEMONTIA

1. Prostrate herb with strigose, 2-armed trichomes and fleshy, obcordate leaves. 4. *J. ovalifolia* subsp. *obcordata*.
1. Climbing or shrubby plants with trichomes and leaves otherwise.
 2. Flowers borne in hirsute, headlike cymes. 7. *J. tamnifolia*.
 2. Flowers otherwise.

3. Leaves cordate or broadly ovate; corolla not deeply lobed.
 4. Inflorescence very lax; flowers tubular, red-purple. 6. *J. solanifolia*.
 4. Inflorescence not very lax; flowers funnel shaped, blue.
 5. Leaves and stems velvety. 2. *J. cumanensis*.
 5. Leaves and stems not velvety. 5. *J. pentantha*.
3. Leaves not broadly ovate or cordate; corolla deeply lobed.
 6. Inflorescence sessile or on a very short peduncle. 8. *J. verticillata*.
 6. Inflorescence pedunculate.
 7. Leaves thick, often roundish; flowers solitary or few, on short peduncles. 1. *J. cayensis*.
 7. Leaves not very thick, often linear or oblong; flowers solitary to several, in lax cymes. 3. *J. havanensis*.

1. *Jacquemontia cayensis* Britton in Britton & Millspaugh, Fl. Bahamas, 349. 1920.

Scrambling shrub or woody vine with many branches; stems, petioles, peduncles, and pedicels pubescent, often hoary, the hairs very short and with several arms. Petioles usually 5 mm. or less; blades elliptic, obovate, oblong, or orbicular, rarely exceeding 3 cm. in length, with glandular dots on both surfaces and sometimes also lines on the lower surface, glabrous, sparsely pubescent, or tomentose, the apex retuse or blunt, usually mucronate, the base cuneate or rounded, the margin entire, often tinged reddish brown. Peduncles shorter or longer than subtending petioles; flowers solitary or few; bracts minute; pedicel(s) ridged, ca. 5 mm. long; sepals subequal, 2–3 mm. long, glabrous or pubescent, especially at the apex; corolla white, deeply 5-lobed, ca. 1 cm. long; stamens and pistil well exerted; stigmas kidney shaped. Capsule conical, ca. 4 mm. high, 8-valved; seeds 4, narrowly winged on 3 margins and sometimes around the hilum.

GENERAL DISTRIBUTION. West Indies.

DISTRIBUTION IN LESSER ANTILLES. Anguilla, St. Barts, Barbuda, Antigua.

Because *Jacquemontia cayensis* can be distinguished from the very similar and variable *J. havanensis* only by the degree of coarseness of its stems, the thickness of its leaves, and the size of its inflorescence, it seems questionable that the two species should be maintained as distinct.

2. *Jacquemontia cumanensis* (H.B.K.) Kuntze, Rev. Gen. Pl. 2: 441 1891.

Convolvulus cumanensis H.B.K. Nov. Gen. Sp. 3: 99 (77 in folio ed.). 1818 [1819].

Convolvulus ferrugineus Vahl, Eclog. 1: 17. 1796 [1797], non *Jacquemontia ferruginea* Choisy, 1837.

Ipomoea ferruginea (Vahl) R. & S. Syst. Veg. 4: 240. 1819.

Ipomoea cumanensis (H.B.K.) G. Don, Gen. Syst. 4: 273. 1838 [1837?].

Woody vine with many branches, pubescent on all parts except the corolla and the inner parts of the flower, with trichomes 3-armed, overlapping. Petioles up to 1.5 cm.; blades velvety, ovate, midrib up to 4 cm. in length, cordate or truncate at base, slightly retuse to acute at apex and usually mucronate, with margins entire or somewhat repand and undulate. Peduncles usually exceeding subtending leaves, bearing a compact cyme of few to several flowers; bracts small, lanceolate, with fewer hairs on the upper surface; pedicels very short; sepals very unequal, the outer 3 clasping the flower, hairier on the outer surfaces, the 2 outermost about as long as wide, 6–8 mm., ovate, acute, the others decreasing in size, the innermost smallest, lanceolate, acuminate; corolla blue, funnel shaped, scarcely lobed, the petals mucronate, 12–16 mm. long; stamens unequal; stigmas kidney shaped. Capsule enveloped by the calyx, ovoid, 4–5 mm. long, straw colored, 8-valved; seeds 4, cream or brown, wingless or rarely with a trace of a wing.

GENERAL DISTRIBUTION. Puerto Rico, Virgin Islands, Netherlands West Indies, Venezuela.

DISTRIBUTION IN LESSER ANTILLES. St. Martin.

3. *Jacquemontia havanensis* (Jacq.) Urban, Symb. Antill. 3: 342. 1902.

Convolvulus havanensis Jacq. Obs. Bot. 2: 25. t. 45, fig. 3. 1767.

Convolvulus jamaicensis Jacq. *ibid.* 3: 6. 1768.

Convolvulus ruderarius H.B.K. Nov. Gen. Sp. 3: 96 (75 in folio ed.). 1818 [1819].

Convolvulus frondosus Willd. ex R. & S. Syst. Veg. 4: 303. 1819.

Ipomoea ruderaria (H.B.K.) G. Don, Gen. Syst. 4: 267. 1838 [1837?].

Convolvulus garberi Chapman, Bot. Gaz. 3: 11. 1878.

Convolvulus obtusifolius Sessé & Moçino, La Naturaleza, ser. 2. 2: (Appendix, Fl. Mex.) 35. 1892 (as *Conuoluulus*).

Jacquemontia ruderaria (H.B.K.) Hallier f. in Solereder, Syst. Anat. Dicot. 641. 1899.

Woody climber with many branches, sparsely to densely pubescent with very short, stellate hairs. Leaves variable; petiole short; blade somewhat coriaceous, ovate, oblong, or linear, up to 5 cm. long, veins depressed above, surface often covered with microscopic glandular dots and sometimes lines, fewer hairs on larger (ovate) leaves, cuneate or rounded at base, rounded, acute or retuse, mucronate at apex, the margins entire, somewhat thickened and revolute in dry material. Peduncles longer than subtending petioles; flowers numerous to few, occasionally solitary; bracts reduced to scales; pedicel filiform; sepals 2–3 mm. long, unequal or subequal, rounded to acute at the apex, usually slightly mucronate, glabrous or with a few hairs especially at the apex, scarious on the edges; corolla white or pale rose-purple, ca. 1 cm. long, deeply lobed, rotate; stamens and pistil well exerted; stigmas kidney shaped. Capsule conical, ca. 5

mm. tall, brown, 8-valved; seeds 4, brown, winged on the 2 outer edges or on all 3 edges and around the hilum.

GENERAL DISTRIBUTION. Florida, Mexico, British Honduras, West Indies.

DISTRIBUTION IN LESSER ANTILLES. Barbuda, southwestern part of island, south of lagoon, *Smith 10463* (A, US); near River Landing, *Box 659* (US).

4. *Jacquemontia ovalifolia* (Vahl ex West) Hallier f. subsp. *obcordata* (Millspaugh) Robertson, Ann. Missouri Bot. Gard. 61: 508. 1974.

Convolvulus ovalifolius sensu Grisebach, Fl. Brit. W. Indian Is. 474. 1862, non Vahl ex West, 1793.

Convolvulus obcordatus Millspaugh, Publ. Field Mus. Bot. 2: 88. 1900.

Jacquemontia obcordata (Millspaugh) House, N. Y. State Mus. Bull. 233: 63. 1921.

Jacquemontia subsalina Britton in Britton & Wilson, Sci. Survey Porto Rico Virgin Is. 6: 106. 1925.

Prostrate plant, rooting occasionally at the nodes, more or less strigose with 2-armed hairs on stems, petioles, peduncles, and pedicels. Petioles about 1/2 length of blades; blades obcordate, fleshy, glabrous, 1–5 cm. long, margin slightly repand. Peduncles shorter or longer than subtending petioles, bearing (1 to) several flowers in umbels; bracts small; pedicel(s) filiform and nodding, ca. 5–8 mm. long; sepals unequal, about 3 mm. long, rounded on the outside sepal to acute on the inside; corolla rotate, ca. 7 mm. long, white, blue, or lavender, scarcely lobed; stigmas strap shaped. Capsule subglobose, straw colored, 2- or 4-valved; seeds 4, brown, very narrowly and unevenly winged on the margins.

GENERAL DISTRIBUTION. Mexico, Central America, West Indies.

DISTRIBUTION IN LESSER ANTILLES. St. Barts, Antigua, Guadeloupe, Marie Galante.

5. *Jacquemontia pentantha* (Jacq.) G. Don, Gen. Syst. 4: 283. 1838 [1837?].

Convolvulus pentanthos Jacq. Collect. 4: 210. 1791.

Convolvulus azureus Desr. in Lam. Encycl. Méth. Bot. 3: 554. Feb. 1792; L. Richard, Actes Soc. Hist. Nat. Paris 1: 107. 1792.

Convolvulus nummularius Vahl, Eclog. 2: 13. 1798, non L. 1753.

Convolvulus violaceus Vahl, Symb. Bot. 3: 29. 1794.

Convolvulus canescens H.B.K. Nov. Gen. Sp. 3: 99 (78 in folio ed.). 1818 [1819].

Jacquemontia violacea (Vahl) Choisy, Mém. Soc. Hist. Nat. Genève 8: 61. 1837.

Jacquemontia azurea (Desr.) Choisy, *ibid.* 62.

Ipomoea canescens (H.B.K.) G. Don, Gen. Syst. 4: 273. 1838 [1837?].

Jacquemontia canescens (H.B.K.) Bentham, Pl. Hartweg. 226. 1846.

Convolvulus umbellatus Sessé & Moçino, Fl. Mex. ed. 2. 32. 1894.

Jacquemontia elongata Britton, Bull. Torrey Bot. Club 53: 470. 1926.

Jacquemontia houseana Standley, Publ. Field Mus. Bot. 11: 140. 1932.

COMMON NAMES. Liane bleue, calalou à dah (Guadeloupe); liseron bleu (Martinique).

Slender vine with many branches, glabrous or with pubescence usually sparse except on young parts, the trichomes 3-armed. Petioles slender, 1–4 cm. long in mature leaves; blades cordate or narrowly ovate, midrib up to 8 cm. long, surface sometimes gland-dotted, usually acuminate or acute at apex, occasionally truncate at base, margin entire (appearing glandular especially at tip). Peduncles much longer than subtending petioles, often longer than leaves; bracts membranous, lanceolate, varying in size, the lowest sometimes 1 cm. long or more; pedicels short; inflorescences cymose-corymbose; few to many flowers; calyx accrescent, the sepals unequal, ovate, acuminate, the 2 outermost largest, ca. 7 mm. long and 5 mm. wide, the exposed ones foliaceous; corolla usually clear blue with a white star, 1.5–2.5 cm. long, wide funnel shaped, flaring from the base, margin entire, petals only slightly mucronate; stamens and pistil exposed; stigmas rod shaped. Capsule ovoid, 4–5 mm. high, brown, completely enveloped by calyx, 8-valved, tardily dehiscent; seeds 4 or fewer, brown, wingless.

GENERAL DISTRIBUTION. Tropical America, Malaysia, Ceylon.

DISTRIBUTION IN LESSER ANTILLES. St. Martin, Barbuda, Saba, St. Eustatius, St. Kitts, Antigua, Montserrat, Guadeloupe, La Désirade, Marie Galante, Îles des Saintes, Dominica, Martinique, St. Lucia, Barbados, St. Vincent, Bequia, Mustique, Cannouan, Union, Grenada.

6. *Jacquemontia solanifolia* (L.) Hallier f. Bot. Jahrb. 16: 542. 1893.

Ipomoea solanifolia L. Sp. Pl. 1: 161. 1753.

Ipomoea filiformis Jacq. Enum. Pl. 13. 1760 (as *Ipomoea*).

Convolvulus filiformis (Jacq.) Desr. in Lam. Encycl. Méth. Bot. 3: 555. 1792.

Convolvulus solanifolius (L.) Sprengel, Syst. Veg. 1: 596. 1824.

Exogonium filiforme (Jacq.) Choisy, Mém. Soc. Hist. Nat. Genève 8: 51. 1837.

Quamoclit solanifolia (L.) Choisy in DC. Prodr. 9: 335. 1845.

Exogonium solanifolium (L.) Britton, Mem. Brooklyn Bot. Gard. 1: 82. 1918.

Quamoclit filiformis (Jacq.) Roberty, Candollea 14: 41. 1952.

COMMON NAME. Patate grand bois (Guadeloupe, Martinique).

Slender, twining stems, pubescent on very young parts with 3-armed hairs. Petioles up to 4 cm., usually ca. 1 cm. long; blades wide to narrowly ovate, midrib up to 6 cm., the apex usually obtuse or slightly retuse, mucronate, the base cordate, truncate, or rounded, the veins depressed above, the surface minutely gland-dotted, the margin entire. Peduncles longer than subtending petioles; inflorescences lax; flowers several; bracts minute; pedicel ca. 1 cm. long; sepals subequal, 3–4 mm. long, rounded to acute, usually slightly mucronate, glabrous except sometimes at the

apex, very narrowly scarious on the edges; corolla red-purple, 2–2.5 cm. long, the tube narrow, lobed, spreading only in the uppermost fifth; stamens and pistil exserted; stigmas subglobose. Capsule conical, ca. 5 mm. high, 8-valved; seeds 4 or fewer, dark brown, winged on 3 edges.

GENERAL DISTRIBUTION. Puerto Rico, Virgin Islands, Lesser Antilles.

DISTRIBUTION IN LESSER ANTILLES. Anguilla, St. Barts, St. Kitts, Antigua, Guadeloupe, Marie Galante, Désirade, Dominica, Martinique, St. Lucia, Barbados, St. Vincent, Prune Island.

7. *Jacquemontia tamnifolia* (L.) Grisebach, Fl. Brit. W. Indian Is. 474. 1862.

Ipomoea tamnifolia L. Sp. Pl. 162. 1753.

Convolvulus capitatus Desr. in Lam. Encycl. Méth. Bot. 3: 554. 1792.

Convolvulus ciliatus Vahl, Eclog. 2: 13. 1798.

Convolvulus tamnifolia (L.) G. F. W. Meyer, Primitiae Florae Essequeboensis, 95. 1818.

Convolvulus guineënsis Schumacher, Beskr. Guineiske Pl. 90. 1827.

Jacquemontia capitata (Desr.) G. Don, Gen. Syst. 4: 283. 1838 [1837?].

Ipomoea guineensis (Schumacher) G. Don, *ibid.* 269.

Thyella tamnifolia (L.) Raf. Fl. Tellur. 4: 84. 1838.

Ipomoea capitata (Desr.) Choisy in DC. Prodr. 9: 365. 1845.

Convolvulus praelongus S. Moore, Trans. Linn. Soc. London Bot. 4: 403. 1895.

Jacquemontia macrocephala Brandegee, Zoe 5: 219. 1905.

Thyella macrocephala (Brandegee) House, Muhlenbergia 5: 68. 1909.

Jacquemontia rondonii Hoehne, Anex. Mem. Inst. Butantan Bot. 1(6): 53. t. 8. 1922.

Jacquemontia mattogrossensis Hoehne, *ibid.* 54. t. 9.

COMMON NAME. Liseron savane (Guadeloupe).

Twining plant with hirsute to glabrate stems, sometimes flowering before twining begins. Hairs long, yellow, and 2-armed on stems, 2-armed or simple on leaves, simple and drying reddish brown on inflorescence. Petioles very short to as long as or longer than blades; blades cordate, sometimes cuneate within the basal sinus, sometimes gland-dotted on the upper surface, midrib up to 9 cm. long, apex usually acuminate, the margin entire, sometimes somewhat repand, sometimes ciliate. Peduncles sturdier and much longer than subtending petioles, often longer than the leaves; inflorescences very compressed, cymose corymbs, with numerous flowers surrounded by several foliaceous bracts; the 2 lowest bracts largest and opposite, lanceolate or ovate, up to 4 cm. long; sepals narrowly triangular, subequal, hirsute, ciliate, dentate from trichome bases, ca. 1 cm. long; corolla lavender-blue with a paler star, ca. 1.5 cm. long or less, funnel shaped, slightly lobed; stigmas strap shaped, slightly stalked. Capsule globose but somewhat flattened, ca. 4 mm. high, 8-valved; seeds 4, brown, wingless.

GENERAL DISTRIBUTION. Africa and the Mascarenes, tropical America.

DISTRIBUTION IN LESSER ANTILLES. Nevis, Guadeloupe, Dominica, Martinique, St. Vincent.

8. *Jacquemontia verticillata* (L.) Urban, Symb. Antill. 3: 339. 1902.

Ipomoea verticillata L. Syst. Nat. ed. 10. 924. 1759.

Convolvulus verticillatus (L.) L. Sp. Pl. ed. 2. 220. 1762.

Convolvulus parviflorus Desr. in Lam. Encycl. Méth. Bot. 3: 556. 1792.

Convolvulus polycarpus H.B.K. Nov. Gen. Sp. 3: 98 (77 in folio ed.). 1818 [1819].

Convolvulus micranthus R. & S. Syst. Veg. 4: 276. 1819.

Convolvulus plumerii Sprengel, Syst. Veg. 1: 602. 1824.

Ipomoea polycarpa (H.B.K.) G. Don, Gen. Syst. 4: 270. 1838 [1837?].

Jacquemontia micrantha (Desr.) G. Don, *ibid.* 283.

Convolvulus nodiflorus Desr. var. *deglabratus* Choisy in DC. Prodr. 9: 414. 1845.

Jacquemontia verticillata (L.) Urban var. *stenophylla* Urban, Symb. Antill. 3: 340. 1902.

Slender vine, pubescent, especially on young parts, with 3-armed trichomes; stems becoming glabrous with age. Petioles slender, \pm 1 cm. long, blades narrowly ovate or oblong, midrib up to 4 cm. long, apex obtuse and mucronate, base cordate, margin entire or slightly repand. Peduncles very short; inflorescences compact cymes of many to few flowers; bracts very small; pedicels 3–4 mm. long; sepals subequal, acuminate, pubescent, 3–4 mm. long; corolla ca. 5 mm. long, pink or lavender, deeply lobed, lobes acute; stigmas broadly strap shaped. Capsule ca. 3 mm. high, globose, (4- or) 8-valved; seeds 4, brown, winged on 2 or 3 margins.

GENERAL DISTRIBUTION. Mexico, Central America, West Indies.

DISTRIBUTION IN LESSER ANTILLES. St. Vincent, Grenada, Cannouan.

5. *Aniseia* Choisy, Mém. Soc. Hist. Nat. Genève 6: 396. 1834.

Herbs twining or prostrate, scarcely branching, glabrous or glabrescent. Leaves short petiolate, linear to oblong-lanceolate, mucronate. Flowers axillary, solitary or few; bracts 2, very small; sepals unequal, enlarging in fruit, the outer 3 larger and often decurrent; corolla white, funnel shaped, with hairs on the outer surface of the convolvulaceous star; pollen smooth; stigma biglobose, ovary bilocular, ovules 4. Capsule 4-valved.

LECTOTYPE SPECIES: *Aniseia uniflora* (Burman f.) Choisy.

Aniseia martinicensis (Jacq.) Choisy, Mém. Soc. Hist. Nat. Genève 8: 66. 1837.

Convolvulus martinicensis Jacq. Select. Stirp. Am. Hist. 26. t. 17. 1763.

Convolvulus uniflorus Burman f. Fl. Indica, 47. t. 21, fig. 2. 1768.

Convolvulus salicifolius Desr. in Lam. Encycl. Méth. Bot. 3: 543. 1792.

?*Convolvulus emarginatus* Vahl, Symb. Bot. 3: 23. 1794.

Ipomoea martinicensis (Jacq.) G. F. W. Meyer, Primitiae Florae Essequiboensis, 98. 1818.

- Ipomoea uniflora* (Burman f.) R. & S. Syst. Veg. 4: 247. 1819.
Convolvulus rheedii Wall. in Roxb. Fl. Indica 2: 70. 1824.
Convolvulus pterocarpus Bert. in Colla, Hortus Ripul. 37. 1824.
Aniseia uniflora (Burman f.) Choisy, Mém. Soc. Hist. Nat. Genève 6: 483.
 t. 2, fig. 9. 1834.
Ipomoea pterocarpa (Bert.) Don, Gen. Syst. 4: 282. 1838 [1837?].
Aniseia salicifolia (Desr.) Steudel, Nom. Bot. ed. 2. 1: 99. 1841.
Jacquemontia chiapensis Brandege, Univ. Calif. Publ. Bot. 6: 60. 1914.

COMMON NAMES. Liseron savane, patate marron (Guadeloupe); petit liseron, patate marron (Martinique).

Annual 2–4 meters long with few branches, climbing or prostrate, growing in moist places, glabrous or with sparse, simple, golden hairs. Petioles short, up to 1 cm. long; blades elliptic, rounded at the apex, mucronate, ca. 6 cm. long. Flowers solitary or occasionally few; peduncle much longer than the subtending petiole, bearing 2 very small bracts at the base of each pedicel; sepals pubescent, acute to acuminate, the outer 3 decurrent, ovate, much larger than the inner 2; corolla white, funnel shaped, tapering to the base, twice as long as the calyx, the outer surface of the star covered with hairs, hairs at the rim forming tufts protruding from the points of the star; anthers bearing glandular vesicles, pollen smooth; stigma biglobose, ovary bilocular, ovules 4. Capsule brown, glabrous, 4-valved, the inner surfaces of the valves pearly smooth, cream colored; seeds very dark brown, with lighter, scaly hairs on the angles and around the hilum.

GENERAL DISTRIBUTION. The tropics.

DISTRIBUTION IN LESSER ANTILLES. Guadeloupe, Marie Galante, Martinique.

6. *Merremia* Dennstedt ex Endl. Gen. Pl. Suppl. 1: 1403. 1841,
nomen cons.

Twiners, glabrous or pubescent, the hairs simple, sometimes glandular. Leaves palmately compound or simple, entire, pedate, or palmately lobed; petiole and peduncle usually long. Flowers axillary, solitary or few to several; bracts small; sepals subequal, usually glabrous, occasionally with hairs, usually stiff and shiny smooth, accrescent; corolla glabrous, white with or without a dark purple center, sometimes completely yellow, funnel shaped or campanulate, occasionally slightly lobed, the 5-pointed star usually well defined, often with marked longitudinal striations; stamens and pistil well included; anthers usually twisted after dehiscence, pollen smooth; stigma biglobose, ovary usually bilocular. Fruit a thin-walled capsule, usually surrounded by the enlarged and thickened calyx, dehiscing by 4 valves or irregularly; seeds (1 to) 4, angular or round depending on the number, pubescent or glabrous.

TYPE SPECIES: *Merremia hederacea* (Burman f.) Hallier f.

KEY TO THE SPECIES OF MERREMIA

1. Leaves simple; flowers yellow or white with dark center.
 2. Leaves cordate to hastate, entire to 3-lobed; calyx scarcely enlarged in fruit.
 3. Leaves more than 5 cm. long; flowers borne in umbels, 2-3 cm. long. 6. *M. umbellata*.
 3. Leaves 1.5-5(-6) cm. long; flowers up to 1 cm. long, not borne in umbels. 3. *M. hederacea*.
 2. Leaves very deeply 7-lobed; sepals much enlarged in fruit.
 4. Leaf lobes sinuate-dentate; flowers white with dark center; fruiting calyx ca. 5 cm. across. 2. *M. dissecta*.
 4. Leaf lobes entire; flowers yellow; fruiting calyx ca. 10 cm. across. 5. *M. tuberosa*.
1. Leaves compound, leaflets 5; flowers white.
 5. Stems and leaves hairy; leaflets entire; outer sepals hispid. 1. *M. aegyptia*.
 5. Stems, leaves, and sepals glabrous; leaflets serrulate. 4. *M. quinquefolia*.

1. *Merremia aegyptia* (L.) Urban, Symb. Antill. 4: 505. 1910.

Ipomoea aegyptia L. Sp. Pl. 1: 162. 1753.

Convolvulus pentaphyllus L. *ibid.* ed. 2. 1: 223. 1762, excl. var. *serpens* L.

Ipomoea pentaphylla (L.) Jacq. Collect. 2: 297. 1788.

Convolvulus nemorosus Willd. ex R. & S. Syst. Veg. 4: 303. 1819.

Ipomoea pilosa Cav. Ic. Descr. Pl. 4: 11. t. 323. 1797.

Batatas pentaphylla (L.) Choisy, Mém. Soc. Hist. Nat. Genève 6: 436. 1834.

Spiranthera pentaphylla (L.) Bojer, Hortus Maurit. 226. 1837.

Merremia pentaphylla (L.) Hallier f. Bot. Jahrb. 16: 552. 1893.

Ipomoea sinaloensis Brandege, Zoe 5: 217. 1905.

Operculina aegyptia (L.) House, Bull. Torrey Bot. Club 33: 502. 1906.

COMMON NAMES. Noyeaux (St. Martin, Saba, St. Eustatius); liane poilue (Guadeloupe, Martinique).

Twiner with hispid stems sometimes becoming glabrous with age. Leaves palmately compound, petiole about equal to length of middle leaflet; leaflets 5, sessile, obovate to lanceolate, entire, middle one up to 14 cm. long and 6 cm. wide, lowest and smallest ones up to 9.5 cm. long and 4.5 cm. wide, midrib sunken above and raised below, the hairs yellow-brown, as long on petiole as on stem, shorter and fewer on blades, more numerous on lower surface, especially on the veins, apex acuminate, base cuneate. Peduncles longer than petioles, hairy; inflorescences lax dichasia of (1 to) 3 to 9 flowers; bracts 3-4 mm. long, narrowly triangular; pedicels 2-4 cm. long, hairy; buds sharply pointed; calyx upright, the sepals oblong, with obtuse apex, the outer 2 slightly larger, with the lower 2/3 conspicuously covered with long, stiff, patent, yellow-brown hairs, the exposed surfaces of inner ones also hairy at the base; corolla all white, campanulate, 3 cm. long, star well marked; stamens subequal, pollen smooth; ovary 4-locular, ovules 4. Capsule globose, not very thin walled, ca. 1 cm.

in diameter, dehiscing regularly by 4 valves, exposing septae extending to form a conical hood over the (1 to) 4 glabrous, brown seeds. Enlarged calyx spreading in fruit.

GENERAL DISTRIBUTION. Tropical America, Africa, Asia, Pacific Islands.

DISTRIBUTION IN LESSER ANTILLES. St. Martin, St. Barts, Saba, St. Eustatius, St. Kitts, Antigua, Montserrat, Guadeloupe, Dominica, Martinique, St. Lucia, Barbados, St. Vincent, Grenada.

2. *Merremia dissecta* (Jacq.) Hallier f. Bot. Jahrb. 16: 552. 1893 (as *M. dissecta*).

Convolvulus dissectus Jacq. Obs. Bot. 2: 4. t. 28. 1767.

Ipomoea dissecta (Jacq.) Pers. in L. Syst. Veg. ed. 15. 207. 1797, in note, non Willd. 1794.

Ipomoea sinuata Ortega, Pl. Horti Regii Bot. Matrit. 84. 1798.

Ipomoea subpedata Desf. Cat. Pl. Horti Regii Paris. (Tableau de l'école Bot. ed. 3.) 397. 1829.

?*Ipomoea nigricans* Gardner, London Jour. Bot. 1: 180. 1842.

Operculina dissecta (Jacq.) House, Bull. Torrey Bot. Club 33: 500. 1906.

COMMON NAMES. Bini bini (Dutch islands); liane amande amère, liane à noyau, liane noyau, méné-vini (Guadeloupe); pâte d'amande, liane à noyau, méné-vini (Martinique).

Twiner; stems, petioles, and peduncles glabrous to hispid, the hairs simple, yellow. Leaves simple, petiole a little shorter than blade; blade very deeply pedately lobed, glabrous, often with numerous black dots on the lower surfaces, the lobes 7, sinuate-dentate, apex acute, extreme tip rounded and mucronate, the central lobe up to 7 cm. long and 4 cm. wide, slightly larger than side lobes (except the very lowest pair), lowest pair sometimes not developing. Peduncles 1–2 times length of petioles; flowers solitary, or few and the inflorescence lax, cymose; pedicel 1.5–3 cm.; bracts ca. 3 mm. long, triangular, caducous; buds nodding, triangular, sharply pointed; calyx upright in flower, the sepals cream colored, slightly fleshy, stiff, boat shaped, ovate, acute, spotted on the inside, thin on the edges, the outer 2 longer and thicker, 2–2.5 cm. long; corolla white with dark red to purple center, campanulate, ca. 4 cm. long, with well-marked striate star; anthers just within throat; ovary bilocular. Fruit nodding, surrounded by the brown, enlarged, spreading calyx, the sepals ca. 3 cm. long; capsule globose, ca. 1.5 cm. high, 4-valved, dehiscing regularly; seeds 4, glabrous, black.

GENERAL DISTRIBUTION. Tropical America; introduced into other tropical regions and sometimes becoming naturalized.

DISTRIBUTION IN LESSER ANTILLES. Anguilla, St. Martin, St. Barts, Saba, St. Eustatius, St. Kitts, Antigua, Montserrat, Guadeloupe, La Désirade, Marie Galante, Dominica, Martinique, St. Lucia, Barbados, St. Vincent, Bequia, Carriacou, Grenada.

3. *Merremia hederacea* (Burman f.) Hallier f. Bot. Jahrb. 18: 118. 1894.

Evolvulus hederaceus Burman f. Fl. Indica, 77. t. 30, fig. 2. 1768.

Convolvulus flavus Willd. Sp. Pl. 1: 852. 1797.

Merremia convolvulacea Dennst. Schlüssel Hortus Malab. 39. 1818, *nomen nudum*.

Convolvulus hederaceus sensu Merrill, Philip. Jour. Sci. Bot. 9: 132. 1914, non L. 1753.

Slender twiner, rooting at and between nodes in contact with soil; stem glabrous or pubescent especially at nodes, occasionally tuberculate. Petioles usually tuberculate, pubescent on grooved upper side; blades simple, cordate, entire to three lobed and coarsely toothed on lower lobes, the midrib 1.5–4(–5) cm. long, equal to or longer than petiole, the lower surface glabrous, the upper surface sparsely strigose, especially on nerves, or sometimes glabrous, the apex acute to acuminate, mucronate. Peduncles shorter than petioles to exceeding length of leaves; inflorescences 3- to many-flowered cymes, occasionally flowers solitary; bracts small, scalelike, caducous; calyx usually smooth and shiny, the sepals subequal, mucronate, the outer ones truncate, the inner ones tridentate, larger, ca. 5 mm. long; corolla yellow, ca. 8 mm. long, campanulate, star well defined by striations; stamens reaching to margin of corolla; stigma biglobose, exserted, ovary 2-celled, style persistent. Fruit ca. 5 mm. tall, depressed-globose and transversely wrinkled below, conical above with lighter-colored, dimpled apex, splitting first into 2 valves and later into 4; seeds 4, dark brown, with 1 curved and 2 flat surfaces, pubescent, hairs longer on the edges; calyx deflexed in mature fruit.

GENERAL DISTRIBUTION. Old World tropics; introduced into Cuba and the Lesser Antilles.

DISTRIBUTION IN LESSER ANTILLES. Guadeloupe, Grande Terre, Grands Fonds, mare de Champvert, *Fournet H-1850, H-2137* (P). This is being treated as a new record for the Lesser Antilles, although it may have been growing in the St. Vincent Botanic Garden almost 200 years ago under the name *Convolvulus flavus*. We have no way of knowing whether the garden plant was *Convolvulus flavus* Willd. (1797) or *C. flavus* Salisbury (1796), the latter being a synonym of *Merremia umbellata*.

4. *Merremia quinquefolia* (L.) Hallier f. Bot. Jahrb. 16: 552. 1893.

Ipomoea quinquefolia L. Sp. Pl. 1: 162. 1753.

Convolvulus quinquefolius (L.) L. Syst. Nat. ed. 10. 923. 1759.

Batatas quinquefolia (L.) Choisy, Mém. Soc. Hist. Nat. Genève 8: 49. 1837.

COMMON NAME. Patate marron (Guadeloupe).

Stems twining, glabrous or with long, patent hairs. Leaves palmately compound, petiolate, petiole up to 5 cm. long; leaflets 5, sessile, glabrous,

lanceolate, serrulate, the midribs raised on lower surfaces, each extended into a mucro, the middle leaflet longest, up to 7 cm. long and 2 cm. wide. Peduncles equal to or longer than subtending leaves; upper portion of peduncle and occasionally pedicel with numerous glandular hairs; bracts ca. 1.5 mm. long, triangular, often mucronate; buds pointed; flowers opening before subtending leaf matures, usually in cymose groups of 3 or 5, occasionally solitary; sepals light green, darker in the center and toward mucro, unequal, stiff, glabrous, the outer 2 shorter, oblong-ovate to triangular, ca. 5.5 mm. long, 3 mm. wide at base, narrower above, emarginate, with a mucro at apex, the inner 3, 7.5–8 mm. long, 3 mm. wide, oblong, boat shaped, auriculate at base, rounded at apex with a small mucro in the middle, the calyx accrescent in fruit; corolla white or cream, funnel shaped, 2 cm. long or more; ovary 4-celled with 4 ovules, style slender, persistent. Capsule depressed-globose, beaked or with entire style attached, straw colored with yellow veining on outer surface, dehiscing into 4 valves; septae 4, transparent, persistent; seeds 4, brown, smooth, covered with scalelike hairs.

GENERAL DISTRIBUTION. Tropical America.

DISTRIBUTION IN LESSER ANTILLES. St. Barts, Antigua, Guadeloupe, Martinique, Barbados, Grenada.

Compare the solitary flowers on spiraled peduncles and the entire leaflets of *Ipomoea wrightii*.

5. *Merremia tuberosa* (L.) Rendle in Dyer, Fl. Trop. Afr. 4(2): 104. 1905.

Ipomoea tuberosa L. Sp. Pl. 1: 160. 1753.

Ipomoea mendesii Welw. Apont. Phytogeogr. in Ann. Conselho Ultramar. 55: 584. 1859.

Operculina tuberosa (L.) Meissner in Martius, Fl. Brasil. 7: 212. 1869.

COMMON NAMES. Liane jaune, liane à tonnelle, liane à courtine, bois patate, rose de Jéricho (Guadeloupe).

Stout climber, glabrous throughout; roots tuberous. Petioles as long as blades or longer; leaves simple; blade up to 14 cm. long, deeply palmately lobed, the lobes 7, occasionally 5, entire, lanceolate, acuminate at apex, largest lobe in the middle, grading down to the smallest at the bottom on either side, the midrib and primary veins raised on the lower surface, midribs of uppermost pair of lobes usually branching pinnately from the central midrib, those of the lower ones branching palmately. Peduncles about as long as the petioles, accrescent; flowers solitary, or several in a lax dichasium; bracts triangular, ca. 2 mm. long, falling very soon; pedicel tapering, ca. 1 cm. long in flower, attaining 3–4 cm. in fruit; pedicel and peduncle becoming woody; sepals ovate, rounded at the apex, 2–3 cm. long, the outer 2 thicker and wider than the others; corolla yellow, ca. 5 cm. long, funnel shaped, reflexed at the margin; pistil tapering, persistent,

ovules large. Capsule straw colored, ca. 3 cm. tall, globose, thin walled, appearing 4-valved but usually dehiscing irregularly and coming loose at the base; fruit surrounded by spreading, accrescent sepals, up to 6 cm. long, woody, striate, brown on the outside, cream colored and shiny on the inside; seeds (1 to) 4, black, hairy, shape depending on number.

GENERAL DISTRIBUTION. Tropical America, Africa, Mascarene Islands, India, Ceylon; cultivated in Hawaii and Malaysia. Probably native to tropical America.

DISTRIBUTION IN LESSER ANTILLES. Guadeloupe, Martinique, St. Lucia (cultivated).

6. *Merremia umbellata* (L.) Hallier f. subsp. *umbellata* Ooststr. & Hoogland, Fl. Males. I. 4(4): 449. 1953.

Merremia umbellata (L.) Hallier f. Bot. Jahrb. 16: 552. 1893.

Convolvulus umbellatus L. Sp. Pl. 1: 155. 1753.

Convolvulus multiflorus Miller, Gard. Dict. ed. 8. [alph. ord.] 1768.

Convolvulus aristolochiaefolius Miller, *ibid.*

Convolvulus flavus Salisbury, Prodr. 124. 1796.

Ipomoea umbellata (L.) G. F. W. Meyer, Primitiae Florae Essequiboensis, 99. 1818.

Convolvulus caracasanus R. & S. Syst. Veg. 4: 301. 1819.

Ipomoea polyanthes R. & S. *ibid.* 234.

Convolvulus sagittifer H.B.K. Nov. Gen. Sp. 3: 100 (79 in folio ed.). 1818 [1819].

Ipomoea sagittifera (H.B.K.) G. Don, Gen. Syst. 4: 273. 1838 [1837?] (as *sagittifer*).

Ipomoea primulaeflora G. Don, *ibid.* 270.

Convolvulus densiflorus Hooker, Bot. Beechey's Voy. 303. 1838.

?*Ipomoea cymosa* (Desr.) R. & S. var. *culta* Choisy in DC. Prodr. 9: 371. 1845.

Convolvulus luteus Martens & Gal. Bull. Acad. Bruxelles 12: 260. Sept. 6, 1845.

Ipomoea micans Garcke, Linnaea 22: 66. 1849.

Ipomoea mollicoma Miq. Stirpes Surinam. Selec. 132. t. 37. 1850.

Merremia umbellata (L.) Hallier f. var. *occidentalis* Hallier f. Versl. Buitenzorg s'Lands Plant. 1895: 127. 1896.

Merremia umbellata (L.) Hallier f. var. *umbellata* Hallier f. Bull. Soc. Bot. Belg. 35: 270. 1896.

Merremia rondoniana Hoehne, Anex. Mem. Inst. Butantan Bot. 1(6): 60. t. 13. 1922.

COMMON NAMES. Liane à berceau, liane-berceau, liane à malingres (Guadeloupe); liane douce jaune, fleur patate jaune, liane à tonnelle (Martinique); hog vine (Barbados).

Twiner, occasionally prostrate and rooting at the nodes, glabrous to pubescent, the hairs simple, white to pale yellow. Leaves simple, stipulate, the stipule small, size variable; petiole $\frac{1}{2}$ – $1\frac{1}{2}$ times length of midrib; blade cordate, sagittate, or occasionally hastate, entire, to 17 cm. long and

12 cm. wide, palminerved, midrib sunken above, all veins prominent beneath, when pubescent, hairs more numerous along nerves, the apex obtuse to acuminate, sometimes emarginate, mucronate. Peduncles usually thicker and much longer than subtending petioles, sometimes winged; flowers numerous to few, in umbels or congested cymes; bracts small, of varying lengths, linear, caducous; pedicels 1–2 cm. long; buds blunt; sepals subequal, a little less than 1 cm. long, stiff, thin on the edges, widely elliptic, boat shaped, rounded at the apex, mucronate; corolla yellow, funnel shaped, 2–3 cm. long, star well marked but not striate; ovary bilocular, ovules 4, style persistent. Capsule globose, 4-valved, brown, dehiscing regularly; sepals separating somewhat, not very much larger than in flower, forming a cup around the base of the capsule; seeds 4, dark brown, pubescent, especially on angles.

GENERAL DISTRIBUTION. Tropical America, West Africa, occasionally in the Far East where it has been introduced.

DISTRIBUTION IN LESSER ANTILLES. St. Barts, Antigua, Montserrat, Guadeloupe, Dominica, Martinique, St. Lucia, Barbados, St. Vincent, Bequia, Grenada.

The Old World *Merremia umbellata* subsp. *orientalis* (Hallier f.) Ooststr. has long hairs on the seeds and usually has white flowers.

7. *Operculina* Silva Manso, Enum. Subst. Brazil. 16. 1837.

Twining plants with perennial stems; stems, petioles, peduncles, and pedicels often winged. Leaves entire or lobed. Peduncles longer than subtending petioles; pedicels wider at the top; calyx large, often not green, pear shaped in bud; calyx and pedicel enlarged in fruit; corolla campanulate or wide funnel shaped, white, yellow, or purple; pollen smooth; stigma biglobose, ovary bilocular, ovules 4. Capsule with exocarp separating as operculum, dehiscence or remainder of wall regular or irregular; seeds 4, pubescent or smooth.

TYPE SPECIES: *Operculina turpethum* (L.) Silva Manso.

KEY TO THE SPECIES OF OPERCULINA

- | | |
|---|---------------------------|
| 1. Leaves palmately lobed. | 3. <i>O. macrocarpa</i> . |
| 1. Leaves not palmately lobed. | |
| 2. Stems without wings; flowers white. | 4. <i>O. ventricosa</i> . |
| 2. Stems winged; flowers not white. | |
| 3. Leaves and stems pubescent; corolla violet; inflorescence 5- to 8-flowered. | 2. <i>O. leptoptera</i> . |
| 3. Leaves and stems glabrous or glabrescent; corolla yellow; flower usually solitary. | 1. <i>O. alata</i> . |

1. *Operculina alata* (Ham.) Urban, Symb. Antill. 3: 343. 1902.

Convolvulus alatus Ham. Prodr. 24. 1825.

Ipomoea hamiltoni G. Don, Gen. Syst. 4: 268. 1838 [1837?].

Ipomoea alulata Miquel, *Linnaea* 18: 599. 1844.

Ipomoea altissima Martius ex Choisy in DC. *Prodr.* 9: 359. 1845.

Ipomoea pterodes Choisy in DC. *ibid.* 361.

Operculina pterodes (Choisy) Meissner in Martius, *Fl. Brasil.* 7: 213. 1869.

Operculina altissima (Choisy) Meissner in Martius, *ibid.* pl. 75.

Climber with stems usually winged. Petioles 1–3 cm. long; blades acuminate, 5 cm. wide, glabrous or glabrescent, midrib up to 9 cm. long, apex mucronate, base cordate, the margin entire, sometimes 3-lobed. Peduncles winged, much longer than subtending petioles, usually bearing a single flower; bracts lanceolate, acuminate, ca. 1 cm. long; pedicels becoming thickened and 5-angled in fruit; buds pear shaped, acute; calyx large, bracts and sepals scarious, in dry material reddish brown, the sepals 2.5–3 cm. long, obtuse, mucronate, becoming more coriaceous in fruit; corolla yellow, campanulate, twice the length of the calyx. Capsule globose, ca. 1 cm. high, splitting irregularly, enveloped by the calyx; seeds 4, black, smooth.

GENERAL DISTRIBUTION. Tropical America.

DISTRIBUTION IN LESSER ANTILLES. Dominica, St. Vincent, Grenada.

2. *Operculina leptoptera* Urban, *Symb. Antill.* 3: 342. 1902.

Climber with winged stems, wings arising from decurrent petioles; stems bearing short, appressed hairs. Petioles (0.8–)3 cm. long, long patent-pilose; blades triangular-ovate, 8 cm. long, 5–6 cm. wide, minutely pubescent on both surfaces, especially on the nerves beneath, the apex acute or somewhat obtuse, mucronate, the base deeply cordate, the margin entire. Peduncles 3.5–5 cm. long, scarcely winged; inflorescences corymbose, 5- to 8-flowered; bracts lanceolate-oblong or oblong, shortly acuminate, (10–)17 mm. long; pedicels 3–3.5 cm. long; sepals yellow-green, 17–22 mm. long, the outer ones longer, smoothly tomentose; corolla violet, 5–5.5 cm. long.

GENERAL DISTRIBUTION. Endemic to Martinique, this was originally described from a single specimen. To our knowledge, it has not been collected again. It is the only *Operculina* in the Lesser Antilles that is entirely pubescent and the only one with violet flowers. *Operculina triquetra* (Vahl) Hallier f. of St. Thomas and St. Croix is pubescent and has white flowers.

3. *Operculina macrocarpa* (L.) Urban, *Symb. Antill.* 3: 343. 1902.

Convolvulus macrocarpus L. *Syst. Nat.* ed. 10. 923. 1759.

Convolvulus operculatus Gomez, *Mem. Math. Phis. Acad. Real Sci. Lisboa* 3: Obs. 1. t. 27, fig. 3. 1812.

Ipomoea operculata (Gomez) Martius in von Spix & Martius, *Reise Brasil.* 2: 547. 1828.

Operculina convolvulus Silva Manso, *Enum. Subst. Brazil.* 12. 1837.

Woody climber; stems winged, 4-sided. Petioles 2.5–7.5 cm. long, decurrent on stem; blades 3- to 7-lobed, divided all the way to the base or not completely, lobes 3.5–10 cm. long, attenuate at both ends, entire. Peduncles winged, longer and stouter than subtending petioles, with 1 or 2 flowers; bracts caducous; pedicels 2–4 cm. long, winged; sepals elliptic, obtuse, 1.5–2.5 cm. long, straw colored; corolla white, 4–5 cm. long, campanulate. Capsule depressed-globose, 2.5–4 cm. in diameter, surrounded by calyx, furrowed above, dehiscence irregular; seeds black, smooth.

GENERAL DISTRIBUTION. Brazil, Cuba, Lesser Antilles.

DISTRIBUTION IN LESSER ANTILLES. Guadeloupe, Martinique.

4. *Operculina ventricosa* (Bert.) Peter in Engler & Prantl, Nat. Pflanzenfam. 4(3a): 32. 1891.

Convolvulus ventricosus Bert. in Colla, Hortus Ripul. 37. 1824.

Ipomoea ventricosa (Bert.) G. Don, Gen. Syst. 4: 274. 1838 [1837?].

Operculina grandiflora sensu House, Muhlenbergia 5: 69. 1909, p. p., non *Convolvulus grandiflorus* Jacq. 1777.

COMMON NAMES. Hoofdpijnblad (St. Eustatius, Saba, St. Martin); liane blanche, liane d'argent (Guadeloupe); liane serpent, liane bord de mer (Martinique).

Climber with many long branches, glabrous or pubescent on young parts. Petioles slender, ca. 5 cm. long; blades large, broadly cordate, up to 16 cm. long, glabrescent, hairs chiefly on nerves below, apex acuminate and mucronate. Peduncles longer than subtending petioles, stout, pubescent, bearing 1 or more flowers in cymes; bracts oblong, acuminate, 2–3 cm. long; pedicels thickened above, angular, pubescent, becoming much enlarged in fruit; calyx glabrescent, the sepals ovate, obtuse, mucronate, 2.5–3.5 cm. long, membranous, accrescent; corolla expanding directly beyond the calyx into a broadly funnel-shaped limb, white or cream, 5–7.5 cm. long. Capsule globose, membranous, ca. 2.5 cm. in diameter, enclosed by calyx, splitting irregularly (herbarium material); seeds 4, black, glabrous, smooth.

GENERAL DISTRIBUTION. Lesser Antilles, Virgin Islands, Marianas Islands (Micronesia); cultivated in Hispaniola (perhaps escaped), Puerto Rico, Surinam.

DISTRIBUTION IN LESSER ANTILLES. St. Martin (*vide* Broeders), St. Barts, Saba, St. Eustatius (cultivated), Antigua, Guadeloupe, Martinique.

First described as cultivated in Guadeloupe (brought from St. Barts), this species is often cultivated in the French and Dutch islands. There are different opinions concerning the mode of dehiscence of its fruit: some authors think that it is by valves; others, that it is irregular. In material seen (St. Croix, *Fosberg 55369*), the fruit had split irregularly, although valves were clearly marked and the operculum had detached.

The Micronesian material is distinguishable by its smaller flowers and

by its larger and much more conspicuous, orbicular to ovate, somewhat persistent bracts. It is a more vigorous form, much more recently reported, and spreads rapidly (Fosberg & Sachet, 1977, p. 29).

8. *Ipomoea* L. Sp. Pl. 1: 159. 1753; Gen. Pl. ed. 5. 76. 1754.

Prostrate or twining plants, occasionally erect shrubs, glabrous or with hairs. Leaves simple, lobed, or palmately compound. Flowers axillary, 1 to many; bracts various, usually small and caducous; calyx very variable, persistent; corolla showy, red, blue, purple, pink, cream, or white, often with a dark center, funnel shaped, campanulate, or salver shaped, star well marked; stamens and pistil exerted or included; pollen round and spiny; ovary 2- to 4-celled, style 1, stigma capitate, simple or lobed. Fruit a valvate capsule; seeds 4 to 6 or fewer, brown or black, hairy or smooth.

TYPE SPECIES: *Ipomoea pes-tigridis* L. (prop. cons.).

KEY TO THE SPECIES OF IPOMOEA

1. Upright shrub with showy, pink-lilac flowers; cultivated.
 *I. carnea* Jacq. subsp. *fistulosa* (Martius ex Choisy) Austin.
1. Creeping or twining plant.
 2. Leaves pinnately many lobed, appearing compound; sometimes cultivated.
 14. *I. quamoclit*.
 2. Leaves not pinnately many lobed.
 3. Leaves less than 2 cm. long, produced with flowers on short shoots.
 5. *I. eggersiana*.
 3. Leaves more than 2 cm. long; no short shoots produced with flowers.
 4. Leaves palmately lobed or palmately compound.
 5. Leaves of axillary buds developed to look like stipules.
 4. *I. cairica*.
 5. Leaves of axillary buds not developed.
 6. Leaves palmately compound.
 7. Leaflets often lobed; peduncle threadlike, usually spiral-
 ing; corolla lilac, ca. 2 cm. long. 24. *I. wrightii*.
 7. Leaflets not lobed; peduncles thick and straight; flowers
 large, dark red; cultivated. *I. horsfalliae* Hooker.
 6. Leaves palmately lobed.
 8. Climbing plant; buds and sepals rounded.
 9. *I. mauritiana*.
 8. Creeping plant; buds pointed; sepals acuminate; culti-
 vated. *I. batatas* (L.) Lam.
 4. Leaves simple or lobed, but not palmately so.
 9. Leaf apices blunt, rounded, retuse, or bilobed.
 10. Leaves oblanceolate or obtriangular. . . 17. *I. sphenophylla*.
 10. Leaves otherwise.
 11. Leaves no more than 1.5 times as long as broad.
 12. Leaves emarginate to bilobed, base cuneate or
 truncate; fruits about 1.5 cm. long.
 12. *I. pes-caprae* subsp. *brasiliensis*.

12. Leaves reniform to cordate; fruit less than 1 cm. long. 3. *I. asarifolia*.
11. Leaves much longer than wide, base truncate to cuneate. 18. *I. stolonifera*.
9. Leaf apices acute to acuminate.
13. Plants prostrate, frequently rooting from the stem.
14. Leaves 1–5 times as long as wide; sepals rounded to acute; aquatic. 2. *I. aquatica*.
14. Leaves usually wider than long; sepals acuminate; producing ground tubers; cultivated.
. *I. batatas* (L.) Lam.
13. Plants climbing or creeping, not usually rooting along the stem.
15. Plants with conspicuous bracts and winged sepals.
. 16. *I. setifera*.
15. Plants otherwise.
16. Sepals ending in prolonged tips equal to half the length or more.
17. Sepals 6 mm. long; flowers red; stems not muricate. 6. *I. hederifolia*.
17. Sepals more than 6 mm. long; flowers not red; stems often muricate.
18. Prolonged tips on 3 outer sepals only; flowers white, tube 8 cm. long or more.
. 1. *I. alba*.
18. Prolonged tips not restricted to 3 outer sepals; flowers lilac, tube less than 8 cm. long. 22. *I. turbinata*.
16. Sepals sometimes mucronate but not extending into prolonged tips.
19. Sepals rounded or obtuse at the apex.
20. Sepals shortly mucronate; flowers usually solitary, white, with a long, narrow tube. 8. *I. macrantha*.
20. Sepals not mucronate; flowers usually in large, lax inflorescences, not white, tube not very narrow.
21. Sepals only subequal; corolla limb completely lobed. 15. *I. repanda*.
21. Sepals distinctly unequal; corolla limb not lobed.
22. Outer sepals larger than inner ones. 13. *I. phyllomega*.
22. Outer sepals smaller than inner ones. 23. *I. walpersiana*.
19. Sepals acute or acuminate.
23. Sepals less than 1 cm. long.
24. Sepals bordered with white edge; flowers 5 cm. or more long, blue.
. 20. *I. tricolor*.

24. Sepals not bordered with white edge; flowers less than 5 cm. long, not blue.
25. Sepals ciliate and/or hirsute below; flowers pink-purple. 21. *I. triloba*.
25. Sepals glabrous or pubescent; flowers white or cream with dark center. 11. *I. obscura*.
23. Sepals ca. 1 cm. long or more.
26. Sepals ca. 1 cm. long; flowers pale lilac. 19. *I. tiliacea*.
26. Sepals 2 cm. or more; flowers blue.
27. Sepals broad and covered with hairs below, the upper portion long, narrow, and upright. 10. *I. nil*.
27. Sepals unequal, usually curling, the outer ovate, the innermost almost linear. 7. *I. indica* var. *acuminata*.

1. *Ipomoea alba* L. Sp. Pl. 1: 161. 1753.

- Convolvulus aculeatus* L. *ibid.* 155, non *Ipomoea aculeata* Blume, 1825.
Ipomoea bona nox L. *ibid.* ed. 2. 1: 228. 1762, *nomen illegit.*
Convolvulus grandiflorus L. f. Suppl. Pl. 136. 1781, non Jacq. 1777.
Convolvulus latiflorus Desr. in Lam. Encycl. Méth. Bot. 3: 561. 1792.
Convolvulus bona-nox (L.) Sprengel, Syst. Veg. 1: 600. 1824.
Convolvulus pulcherrimus Vell. Fl. Flum. 1: 72. 1825; *ibid.*, Icones 2: t. 54. 1827.
Calonyction speciosum Choisy, Mém. Soc. Hist. Nat. Genève 6: 441. t. 1, fig. 4. 1834.
Convolvulus muricatus Blanco, Fl. Filip. 92. 1837.
Convolvulus bona-nox (L.) Bojer, Hortus Maurit. 227. 1837.
Calonyction megalocarpum A. Rich. in Sagra, Hist. Fis. Pol. Nat. Cuba 11: 129. 1850.
Calonyction pulcherrimum Parodi, Contr. Fl. Paraguay, 12. 1877.
Ipomoea aculeata (L.) Kuntze, Rev. Gen. Pl. 2: 442. 1891.
Calonyction aculeatum (L.) House, Bull. Torrey Bot. Club 31: 509. 1904.

COMMON NAMES. Belle de nuit, liane blanche bord de mer (Guadeloupe); fleur de nuit, liane douce (Martinique).

Glabrous creeper; stems often bearing small, recurved prickles. Petioles long, up to 20 cm.; blades large, membranous, midrib up to 16 cm., base deeply cordate, apex acuminate, margin entire. Peduncles as long as petioles or shorter; flowers solitary or few; pedicel(s) 1–2 cm. long; sepals keeled, the outer 3 smaller but each with a very long tip, the inner 2 rounded and mucronate; corolla tube green, up to 10 cm. long and very narrow, the limb white, about as wide as length of tube; stamens and pistil exerted. Pedicel thickening and becoming distinctly angular in

fruit; sepals turning back as the 4 horny valves of capsule dehisce; capsule conical and beaked, 2-celled; seeds 4, dark brown, smooth.

GENERAL DISTRIBUTION. This tropical American plant, usually growing in coastal areas, has become naturalized throughout the tropics.

DISTRIBUTION IN LESSER ANTILLES. St. Barts (cultivated), Guadeloupe, Dominica, Martinique, St. Vincent, Bequia.

2. *Ipomoea aquatica* Forskål, Fl. Aegypt.-Arab. 44. 1775.

Convolvulus repens Vahl, Symb. Bot. 1: 17. 1790, non L. 1753.

Ipomoea reptans Poiret in Lam. Encycl. Méth. Bot. Suppl. 3: 460. 1814, non *Convolvulus reptans* L. 1753.

Ipomoea repens Roth, Nov. Pl. Sp. 110. 1821, *quoad descr.*, non *Convolvulus repens* L. 1753, nec *Ipomoea repens* Lam. 1791.

Ipomoea subdentata Miq. Fl. Indiae Batavae 2: 614. 1857.

Herb trailing in mud or floating in fresh or brackish water; stems glabrous, striate, thick, hollow or spongy, sometimes rooting at the nodes. Petioles mostly longer than blades; blades thin, sagittate, hastate, or cordate, up to 15 cm. long, typically much narrower than long, the apex usually acuminate, mucronate. Peduncles bearing 1 to few flowers; pedicels sometimes considerably longer than peduncles; bracts very small; sepals more or less equal, 7–8 mm. long, ovate, obtuse to acute; corolla funnel shaped, pale pink or lilac, with a darker center (white flowered in some Asian material), ca. 5 cm. long. Capsule globose, ca. 1 cm. wide, slightly pointed at the apex, 2-celled; seeds 4 or fewer, silky (those examined immature, without hairs).

GENERAL DISTRIBUTION. Native of Far East tropics; sometimes cultivated as a vegetable; distributed throughout the tropics. (Used as a vegetable in Trinidad.)

DISTRIBUTION IN LESSER ANTILLES. Guadeloupe, Mare Caybo, 2.5 km. SW. of Le Moule, *Proctor 19949* (A); St. François mare, *Rodriguez 4224* (P); mares alcalines, Anse Bertrand, *Stehlé 1584* (GH).

Not previously reported from the Lesser Antilles.

3. *Ipomoea asarifolia* (Desr.) R. & S. Syst. Veg. 4: 251. 1819.

Convolvulus asarifolius Desr. in Lam. Encycl. Méth. Bot. 3: 562. 1792.

Ipomoea repens Lam. Tabl. Encycl. Méth. 1: 467. 1791 [1793].

Convolvulus rugosus Rottler, Ges. Naturf. Freunde Berlin Neue Schr. 4: 196. 1803.

Ipomoea beladamboe R. & S. Syst. Veg. 4: 233. 1819.

Convolvulus beladambu (R. & S.) Sprengel, Syst. Veg. 1: 608. 1824.

Convolvulus flagelliformis Roxb. Fl. Indica 2: 68. 1824.

Ipomoea rugosa (Rottler) Choisy, Mém. Soc. Hist. Nat. Genève 6: 446. 1834.

Ipomoea urbica Choisy in DC. Prodr. 9: 349. 1845.

Convolvulus urbicus Salzm. ex Choisy in DC. *ibid.* 350, in synonym.

Fleshy, creeping herb (dried stems hollow) of seashore and low ground near shore, sometimes with upright branches. Petioles grooved on the upper side, about as long as blades, with 2 glands at the upper end; blades reniform to cordate, 4–7(–10) cm. long and as wide. Peduncles usually as long as petioles; flowers (1 to) several; sepals in open flowers unequal, mucronate, oblong, blunt at the apex, the outer 2 thicker and about half as long as the membranous inner 3 (up to 14 mm.); corolla funnel shaped, rose-purple, 4–7 cm. long. Capsule globose, 1 cm. across, beaked, 2-celled; seeds 4, brown, smooth (immature material seen).

GENERAL DISTRIBUTION. Tropical America, Africa, Asia, Malaysia.

DISTRIBUTION IN LESSER ANTILLES. "Danish and French islands" (*vide* Grisebach), Martinique, St. Lucia.

4. *Ipomoea cairica* (L.) Sweet, Hortus Brit. 287. 1827.

Convolvulus cairicus L. Syst. Nat. ed. 10. 922. 1759.

Ipomoea palmata Forskål, Fl. Aegypt.-Arab. 43. 1775.

Convolvulus tuberculatus Desr. in Lam. Encycl. Méth. Bot. 3: 545. 1792.

Ipomoea stipulacea Jacq. Pl. Rar. Horti Caes. Schoenbr. 2: 39. t. 199. 1797.

Ipomoea pendula R. Br. Prodr. 486. 1810.

Ipomoea tuberculata (Desr.) R. & S. Syst. Veg. 4: 208. 1819.

Ipomoea cavanillesii R. & S. *ibid.* 214.

Ipomoea bouvetii Duch. & Walp. Linnaea 23: 752. 1850.

Convolvulus paniculatus Naves in Blanco, Fl. Filip. ed. 3. 1: 131 and illustr. opp. 1877, non L. 1753.

COMMON NAME. Liane à tonnelle (Guadeloupe).

Perennial climber or creeper; stems becoming straw colored and warty, later wrinkled. Petioles slender, 1–6 cm. long; blades palmately compound or nearly so, leaflets 5, the lowest two sometimes 2-lobed, the middle one sometimes 3-lobed; leaflets and lobes ovate or ovate-lanceolate, the apex acute to rounded, mucronate, the base attenuate; small leaves on axillary shoots appearing as stipules. Peduncles usually short, 1- to several-flowered; bracts minute; sepals subequal or the outer ones shorter, rounded at the apex, scarious on the edges, 5–8 mm. long; corolla funnel shaped, lilac with tube purple inside, up to 7 cm. long. Capsule brown, smooth, ca. 1 cm. in diameter, 4-valved, 2-celled; seeds 4 or fewer, very dark brown, woolly, with long, light, silky hairs on edges.

GENERAL DISTRIBUTION. This African species has been widely cultivated in the tropics and has escaped.

DISTRIBUTION IN LESSER ANTILLES. Guadeloupe, Barbados, Grenada.

West Indian material never seems to have the tomentose leaf axils of African material. In addition, West Indian specimens have fewer flowers per inflorescence and rarely, if ever, set fruit.

5. *Ipomoea eggersiana* Peter in Engler & Prantl, Nat. Pflanzenfam. 4(3a): 30. 1891.

Ipomoea arenaria sensu Urban, Symb. Antill. 4: 508. 1910, p. p., non R. & S. 1819.

Exogonium eggersii House, Bull. Torrey Bot. Club 35: 104. *pl.* 2a. 1908.

Slender, glabrous, trailing or twining vine. Leaves small, 1 cm. long or less, very variable, from simple and ovate to 6-lobed, more often with the apex emarginate and mucronate, the base truncate and with 2 pronounced basal lobes; 2 to several leaves borne on a short shoot at each node. Peduncles usually less than 1 cm. long; flowers solitary; calyx 5–6 mm. long, the sepals rounded, subequal; corolla campanulate to broadly funnel shaped, ca. 4 cm. long, green on the outside of the tube, pink, lilac or almost white on the limb, conspicuous among the very small leaves. Capsule ovoid, brown, 1 cm. high, 4-valved, inside of valve straw colored and shiny, septum opaque; seeds 4, dark brown, with long, silky, brown hairs on the end opposite the hilum.

GENERAL DISTRIBUTION. Virgin Islands, Lesser Antilles.

DISTRIBUTION IN LESSER ANTILLES. Anguilla, St. Martin.

A plant of dry coastal thickets, *Ipomoea eggersiana* is remarkably like *I. steudelii* Millsp. of Puerto Rico; both are usually determined as *Ipomoea arenaria* (Choisy) Steudel or *Exogonium arenarium* Choisy. The leaves are alike and are borne on similar short shoots; the fruits and seeds are indistinguishable. The flowers differ, however: the Puerto Rican plant has scarlet, more salver-form flowers; the limb is recurved, with stamens and pistil exserted; the peduncles and calyx are longer, and the inner sepals are more obviously longer than the outer ones.

Choisy (Convolv. Rar. 51. *fig.* 1. 1837) gave the distribution of his species as Puerto Rico, St. Thomas, St. Domingue, and the Bahamas. The illustration accompanying his description, however, was of the Puerto Rican plant; it was clearly the Bertero specimen (lectotype, G-DC) from Puerto Rico that Choisy cited later in De Candolle's *Prodromus* (9: 347. 1845). Millspaugh (Field Mus. Publ. Bot. Ser. 2: 86. 1900) renamed the taxon *Ipomoea steudeli*, *I. arenaria* (Choisy) Steudel (non R. & S. 1819) being illegitimate.

Whether the narrow corolla and the exserted pistil and stamens are enough to separate species is a matter of opinion. If not, *Ipomoea steudelii* would be included in the synonymy of *I. eggersiana* Peter.

House recognized the differences between these plants and described the plant from the Virgin Islands (St. Thomas) under the name *Exogonium eggersii* (1908). However, Peter had already named the species in his treatment of the Convolvulaceae in 1891. Peter's description was quite inadequate, and the species would have been unidentifiable except for the fact that he mentioned the locality and the short shoot, a distinctive character. These shoots are so short and the flowers are so much larger than the leaves that the flowers of one shoot appear to be an inflorescence.

6. *Ipomoea hederifolia* L. Syst. Nat. ed. 10. 2: 925. 1759.

Ipomoea coccinea sensu auct., non L. 1753.

Ipomoea angulata Lam. Tabl. Encycl. Méth. 1: 464. 1793.

Ipomoea phoenicea Roxb. Fl. Indica 2: 92. 1824.

Convolvulus angulatus (Lam.) Sprengel, Syst. Veg. 1: 596. 1825 [1824].

Convolvulus phoeniceus (Roxb.) Sprengel, *ibid.*

Quamoclit phoenicea (Roxb.) Choisy, Mém. Soc. Hist. Nat. Genève 6: 433. 1834.

Quamoclit angulata (Lam.) Bojer, Hortus Maurit. 224. 1837.

Quamoclit coccinea sensu Urban, Symb. Antill. 4: 514. 1910, non Moench, 1794.

COMMON NAMES. Liseron hallier (Guadeloupe); liseron rouge (Martinique).

Herbaceous vine, glabrous or glabrescent. Petioles about equal to the midribs, up to 9 cm. long; blades membranous, apex acuminate, base cordate, the margin simple, angular in the lower half and/or with 2 large basal lobes. Peduncles sturdier and much longer than subtending petioles, bearing few- to several-flowered dichasia; pedicels 1–1.5 cm. long, ribbed, thickening in fruit; sepals rounded at the apex, subequal, ca. 3 mm., with a subulate appendage near the apex, appendages equal to or longer than sepals; corolla scarlet, salver shaped, the tube ca. 3.5 cm., usually slightly curved; stamens and pistil exerted. Capsule globose, 6–8 mm. high, short beaked (1 mm.), 4-valved, 4-celled; seeds 4, covered with short hairs; transparent septae persisting after seeds are shed.

GENERAL DISTRIBUTION. Tropical America; introduced into the Old World tropics.

DISTRIBUTION IN LESSER ANTILLES. St. Barts, St. Kitts, Antigua, Montserrat, Guadeloupe, Dominica, Martinique, Barbados, St. Vincent, Canouan, Grenada.

This species can be most readily distinguished from the continental species *Ipomoea coccinea* L. by the capsule. In *I. coccinea* the beak is about three times as long, and the pedicel is reflexed instead of upright.

7. *Ipomoea indica* (Burman) Merr. var. *acuminata* (Vahl) Fosberg, Bot. Not. 129: 38. 1976.

Convolvulus acuminatus Vahl, Symb. Bot. 3: 26. 1794.

Ipomoea acuminata (Vahl) R. & S. Syst. Veg. 4: 228. 1819, non Ruiz & Pavon, 1799, an invalid name.

Ipomoea cathartica Poiret in Lam. Encycl. Méth. Bot. Suppl. 4: 633. 1816.

Pharbitis cathartica (Poiret) Choisy in DC. Prodr. 9: 342. 1845.

Pharbitis acuminata (Vahl) Choisy in DC. *ibid.*

COMMON NAME. Patate marron (Guadeloupe).

Herbaceous vine of hedges and fields, occasionally rooting along the

stem, not only at nodes, glabrous or occasionally pubescent. Petioles longer or shorter than blades; blades cordate, entire or 3-lobed, middle lobe oblong or elliptic, lateral lobes ovate, midrib up to 10 cm. long, the apex acuminate, mucronate. Peduncles (1- to) several-flowered; inflorescences cymose; bracts membranous, linear, 10–18 mm. long; calyx foliaceous (frequently curling in drying), sepals very unequal in width, the outer 2 ovate, the innermost almost linear, up to 2 cm. long, acuminate; corolla funnel shaped, 6–7 cm. long, deep blue with white center early in the morning, blue portion becoming purple to pink late in the day; ovary surrounded by deep disc. Capsule (2- to) 3-celled, globose, 10–15 mm. wide, beaked, 3- (to 6-)valved; seeds black, smooth, with short hairs around the hilum.

GENERAL DISTRIBUTION. Tropical America.

DISTRIBUTION IN LESSER ANTILLES. St. Kitts, Montserrat, Guadeloupe, St. Vincent.

8. *Ipomoea macrantha* R. & S. Syst. Veg. 4: 251. 1819.

Ipomoea violacea L. Sp. Pl. 161. 1753, *nomen dubium*; Manitz, Feddes Report. 88: 265. 1977.

Convolvulus grandiflora Jacq. Hortus Bot. Vindob. 3: 39. pl. 69. 1776 [1777].

Ipomoea longiflora R. Br. Prodr. 484. 1810, non Willd. 1809.

Convolvulus tuba Schlecht. Linnaea 6: 735. 1831.

Ipomoea glaberrima Bojer ex Bouton in Hooker, Jour. Bot. Hooker 1: 357. 1834 [1835].

Calonyction grandiflorum (Jacq.) Choisy, Mém. Soc. Hist. Nat. Genève 6: 442. 1834, in note.

Calonyction muticum Decaisne, Nouv. Ann. Mus. Paris 3: 390. 1834.

?*Convolvulus catharticus* Blanco, Fl. Filip. 94. 1837.

Calonyction comosperma Bojer, Hortus Maurit. 228. 1837.

Ipomoea tuba (Schlecht.) G. Don, Gen. Syst. 4: 271. 1838 [1837?].

Calonyction jacquinii G. Don, *ibid.* 264.

Calonyction tuba (Schlecht.) Colla, Mem. Nuova Sp. Calon. 15. 1840.

Ipomoea grandiflora (Jacq.) Hallier f. Bot. Jahrb. 18: 153. 1893, nec Lam. 1791, nec Roxb. 1832.

Calonyction album sensu House, Bull. Torrey Bot. Club 31: 591. 1904, description only, not *I. alba* L.

COMMON NAMES. Sultane grande, belle de nuit, liane blanche bord de mer (Guadeloupe); fleur de nuit, liane douce, liane douce bord de mer (Martinique).

Fleshy, glabrous creeper or climber of coastal areas; older stems straw colored, drying shiny and wrinkled. Petioles up to 11 cm. long; blades with midrib about equal to petiole, base deeply cordate, apex usually acuminate, the margin entire, or occasionally lobed about halfway up each side, each lobe with an acuminate tip. Peduncles usually shorter than subtending petioles; flower(s) 1, occasionally 2; sepals rounded at apex, shortly mucronate, thin on the margins, ca. 2 cm. long, the outer slightly shorter than

the inner; corolla white, the tube 7–8 cm. long, narrow, the limb about as wide as length of tube. Pedicel thickened, becoming longer and more club shaped in fruit; sepals enlarging, becoming fleshy, finally drying and turning back against pedicel; capsule globose, straw colored, 2–3 cm. high, 2-celled, dehiscing into 4 parchment-like valves; seeds 4, brown-black, pubescent, with long, light brown, silky hairs along the margins and around the hilum.

GENERAL DISTRIBUTION. The tropics.

DISTRIBUTION IN LESSER ANTILLES. Saba, St. Eustatius, St. Kitts, Guadeloupe, Martinique, St. Lucia, Barbados, St. Vincent, Bequia, Prune Island.

As stated in an earlier paper (Powell, Nicolson, & Austin, 1978, p. 202), we agree that the lectotype of *Ipomoea violacea* L. is the Boerhaave copy of a Plumier drawing most probably to be identified with *I. macrantha*. However, before accepting *I. violacea* as the correct name, we prefer to wait until the original Plumier drawing is studied.

9. *Ipomoea mauritiana* Jacq. Collect. 4: 216. 1791.

Convolvulus paniculatus L. Sp. Pl. 1: 156. 1753.

Ipomoea gossypifolia Willd. Enum. Pl. 208. 1809.

Ipomoea paniculata (L.) R. Br. Prodr. 486. 1810, non Burman f. 1768.

Ipomoea insignis Andrews, Bot. Repos. 10: pl. 636. 1797 [1811].

Ipomoea ennealoba Beauv. Fl. Oware Bénin Afr. 2: 69. t. 101. 1818.

Ipomoea eriosperma Beauv. *ibid.* 73. t. 105.

Convolvulus roseus H.B.K. Nov. Gen. Sp. 3: 108 (84 in folio ed.). 1818 [Feb. 1819].

Ipomoea quinqueloba Willd. ex R. & S. Syst. Veg. 4: 789. (Jan.–June) 1819.

Convolvulus insignis (Andrew) Sprengel, Syst. Veg. 1: 592. 1824.

Batatas paniculata (L.) Choisy, Mém. Soc. Hist. Nat. Genève 6: 436. 1834.

Ipomoea digitata sensu auct., non L. 1759; Griseb. Fl. Brit. W. Indian Is. 469. 1862.

Heavy vine with tuberous roots. Petioles shorter than blades, usually with minute hairs, top glandular; blades up to 15 cm. across, 10 cm. long, veins usually with minute hairs, usually deeply palmatifid with 7, 5, or 3 lobes, the lobes oblong-lanceolate, entire, the basal ones sometimes ovate. Peduncles longer and stouter than petioles; flowers many to few, crowded; buds rounded; sepals glabrous, rounded at the apex, concave, ca. 8 mm. long, coriaceous; corolla pink, lilac, sometimes darker, ca. 5 cm. long. Capsule globose, ca. 1 cm. in diameter, basal portion cupped by calyx, splitting by 4 valves, 2-celled; seeds 4, with long hairs.

GENERAL DISTRIBUTION. The tropics.

DISTRIBUTION IN LESSER ANTILLES. Martinique, Barbados, St. Vincent.

10. *Ipomoea nil* (L.) Roth, Catalecta Bot. 1: 36. 1797.

Convolvulus nil L. Sp. Pl. ed. 2. 1: 219. 1762.

Convolvulus hederaceus L. *ibid.*

- Ipomoea scabra* Forskål, Fl. Aegypt.-Arab. 44. 1775.
Ipomoea cuspidata Ruiz & Pavon, Fl. Peruv. Chil. 2: 11. t. 119, fig. a. 1799.
Ipomoea setosa Blume, Bijdr. Fl. Ned. Indië, 714. 1825 [1826].
Convolvulus tomentosus Vell. Fl. Flum. 1: 74. 1825; *ibid.*, Icones 2: t. 65. 1827.
Pharbitis nil (L.) Choisy, Mém. Soc. Hist. Nat. Genève 6: 439. 1834.
Pharbitis cuspidata (Ruiz & Pavon) G. Don, Gen. Syst. 4: 263. 1838 [1837?].
Ipomoea trichocalyx Steudel, Nom. Bot. ed. 2. 1: 819. 1840, non G. Don, 1838 [1837?].
Ipomoea longicuspis Meissner in Martius, Fl. Brasil. 7: 227. 1869.

COMMON NAMES. Liseron hallier, liseron bleu (Guadeloupe); liseron bleu (Martinique).

Herbaceous twiner; stems, petioles, and peduncles usually retrorsely pilose. Leaves entire to deeply 3-lobed, midrib up to 12 cm. long, pilose to glabrescent on both surfaces, blunt to acuminate at tips of lobes, the base cordate, the apex acuminate. Peduncles 1–16 cm. long; flowers (1 to) several; bracts linear, the lowest 8–10 mm. long; sepals 2–3 cm. long, broader, covered with long, patent hairs at the base, the upper portion upright, long and narrow, scarcely tapering; corolla funnel shaped, 3–5 cm. long, blue with a white tube. Sepals widening at base and surrounding the globose, 3-celled, 3-valved capsule; seeds 6 or fewer, brown-black, covered with short hairs.

GENERAL DISTRIBUTION. Throughout the tropics; often cultivated.

DISTRIBUTION IN LESSER ANTILLES. St. Martin, St. Barts, Saba, St. Eustatius, Antigua, Montserrat, Guadeloupe, Dominica, Martinique, St. Lucia, Barbados, St. Vincent, Ronde, Grenada.

11. *Ipomoea obscura* (L.) Ker-Gawler, Bot. Reg. 3: t. 239. 1817.

- Convolvulus obscurus* L. Sp. Pl. ed. 2. 1: 220. 1762.
Ipomoea solanifolia Burman f. Fl. Indica, 49. 1768, non L. 1753.
Ipomoea luteola R. Br. Prodr. 485. 1810.
Ipomoea insuavis Blume, Catal. 50. 1823.

Slender vine. Petioles usually slightly shorter than blades; blades entire, cordate, varying in size to ca. 8 cm. from base of basal lobe to apex, glabrous, sometimes ciliate, or more often hairy on one or both surfaces. Peduncles longer and more slender than subtending petioles, bearing 1 to 3 flowers; bracts 2, minute; buds pointed; sepals glabrous to pubescent, acute, subequal, 3–4 mm. long; corolla white or cream, dark centered, funnel shaped, 2–2.5 cm. long. Capsule straw colored, globose, ca. 1 cm. high, 2-celled, 4-valved; seeds 4, black, completely covered by short hairs.

GENERAL DISTRIBUTION. Eastern tropical Africa to Fiji, Polynesia, West Indies.

DISTRIBUTION IN LESSER ANTILLES. Antigua, Marie Galante, Barbados.

12. *Ipomoea pes-caprae* (L.) R. Br. subsp. *brasiliensis* (L.) Ooststr. *Blumea* 3: 533. 1940.

Convolvulus brasiliensis L. *Sp. Pl.* 1: 159. 1753.

Ipomoea pes-caprae sensu R. Br. in Tuckey, *Narr. Exped. Zaire*, 477. (March) 1818, non *Convolvulus pes-caprae* L. *Sp. Pl.* 1: 159. 1753.

Convolvulus maritimus Desr. in Lam. *Encycl. Méth. Bot.* 3: 550. 1792.

Ipomoea crassifolia Pers. *Syn. Pl.* 1: 184. 1805.

Ipomoea maritima (Desr.) R. Br. *Prodr.* 486. 1810.

Ipomoea orbicularis Elliott, *Bot. S. Carolina Georgia* 1: 257. 1817.

Ipomoea brasiliensis (L.) Sweet, *Hortus Suburban London*, 35. June/July, 1818.

Ipomoea brasiliensis (L.) G. F. W. Meyer, *Primitiae Florae Essequiboensis*, 97. Nov. 1818.

Convolvulus bilobatus Roxb. *Fl. Indica* 2: 73. 1824.

Convolvulus rotundifolius Schum. & Thonn. *Beskr. Guineiske Pl.* 102. 1827.

Ipomoea pes-caprae (L.) R. Br. var. *emarginata* Hallier f. *Bull. Soc. Bot. Belg.* 37: 98. 1898.

COMMON NAMES. Brievengat, ivy, sea vine (Dutch islands); patate bord de mer (Guadeloupe, Martinique); passe-pierre (les Saintes); seaside-yam, goat's foot, ipomoea (Barbados).

Prostrate seashore plant, glabrous; stems with latex. Petioles 1–12 cm. long; blades oblong to rotund, emarginate to shallowly bilobed, up to 12 cm. long, subcoriaceous, with a gland on either side of the midrib on the under surface at the base of the blade, apex mucronate, base truncate to cuneate. Peduncles shorter or longer than subtending petioles; flowers (1 to) several; bracts small; pedicel(s) 2–5 cm. long; sepals rounded at the apex, mucronate, the outer 2 shorter, the inner ones ca. 1 cm. long; corolla funnel shaped, dark lavender, ca. 5–6 cm. deep. Capsule globose, lower portion surrounded by persistent calyx, dehiscent into 4 valves, brown on the outside, very light brown to white on the inside, 2-celled; seeds 4, covered with dark brown hairs.

GENERAL DISTRIBUTION. Tropical seashores.

DISTRIBUTION IN LESSER ANTILLES. St. Martin, St. Barts, St. Eustatius, Antigua, Montserrat, Guadeloupe, La Désirade, Dominica, Martinique, St. Lucia, Barbados, St. Vincent, Bequia, Grenada.

13. *Ipomoea phyllomega* (Vell.) House, *Ann. N. Y. Acad.* 18: 246. 1908 (as *phillomega*).

Convolvulus phyllomega Vell. *Fl. Flum.* 1: 74. 1825 (as *philomega*); *ibid.*, *Icones* 2: pl. 63. 1827 (as *phillomega*).

Ipomoea capparoides Choisy, *Mém. Soc. Hist. Nat. Genève* 8: 59. 1839.

Ipomoea demerariana sensu auct., non Choisy, 1845; Griseb. *Fl. Brit. W. Indian Is.* 471. 1861.

Aniseia syringifolia Dammer, *Bot. Jahrb.* 23(57): 38. 1897.

COMMON NAME. Patate marron (Martinique).

High-climbing forest twiner with large, cordate leaves. Petioles half the length of midribs or less; blades up to 21 cm. wide, midrib up to 19 cm. long. Peduncles stout, widely branched to form a large, lax corymb; bracts lanceolate, 1–1.5 cm. long, caducous; 2 outer sepals 1.5–2 cm. long, blunt or rounded at the apex, tinged the color of the corolla, more or less surrounding the 3 inner, considerably smaller sepals; corolla campanulate, magenta or deep rose, the tube wide, ca. 4 cm. deep, the limb ca. 6 cm. in diameter. Capsule beaked, globose, 4-valved, 2-celled, surrounded by sepals; seeds 4, pubescent, with long, marginal, brown, silky hairs persistent on the end opposite the hilum.

GENERAL DISTRIBUTION. Central and South America, West Indies.

DISTRIBUTION IN LESSER ANTILLES. St. Kitts, Guadeloupe, Dominica, Martinique, St. Lucia, St. Vincent.

14. *Ipomoea quamoclit* L. Sp. Pl. 1: 159. 1753.

Convolvulus pennatus Desr. in Lam. Encycl. Méth. Bot. 3: 567. 1792.

Convolvulus quamoclit (L.) Sprengel, Syst. Veg. 1: 591. 1824.

Quamoclit vulgaris Choisy, Mém. Soc. Hist. Nat. Genève 6: 434. 1833.

Quamoclit pinnata Bojer, Hortus Maurit. 224. 1837.

Quamoclit quamoclit (L.) Britton in Britton & Brown, Illus. Fl. No. U. S. 3: 22. 1898.

COMMON NAMES. Regadero, sweet Willy (Dutch islands); cheveux de Vénus, liane rouge, herbe à éternuer, goutte de sang (Guadeloupe); cheveux de Vénus, lin (Martinique); sweet William (St. Vincent, Barbados).

Slender, glabrous, herbaceous twiner. Petioles less than 1 cm. to as long as leaf blades, up to 6 cm. long; blades ovate, very deeply pinnately partite, segments linear, the apical segment usually mucronate, the basal pair subdivided; leaves of axillary buds appearing like stipules. Peduncles usually longer than subtending petioles, bearing 1 to few scarlet or occasionally white (Guadeloupe) flowers; bracts small; sepals unequal, rounded at the apex, mucronate, the longest (inner) ca. 5–6 mm. long; corolla salver shaped, the tube 2–2.5 cm. long, the limb 5-lobed, ca. 2 cm. across; stamens and pistil exserted, entire pistil often persisting until capsule matures. Capsule ovoid, lower portion surrounded by persistent calyx, straw colored, 4-valved, 4-celled; seeds 4, ovate, black with minute, brown hairs; septae persistent, transparent with brown margins.

GENERAL DISTRIBUTION. Of uncertain origin; widespread in the tropics; usually cultivated.

DISTRIBUTION IN LESSER ANTILLES. St. Martin (*vide* Broeders), St. Barts, Saba, St. Eustatius, St. Kitts, Antigua, Guadeloupe, Marie Galante, Dominica, Martinique, St. Lucia, Barbados, St. Vincent, Grenada, Canouan.

In the Lesser Antilles it is usually cultivated, but frequently escapes.

15. *Ipomoea repanda* Jacq. Enum. Syst. Pl. 13. 1760 (as *Ipomoea*).

Convolvulus repandus (Jacq.) Desr. in Lam. Encycl. Méth. Bot. 3: 555. 1792.

Exogonium repandum (Jacq.) Choisy, Mém. Soc. Hist. Nat. Genève 8: 50. 1837.

?*Ipomoea eriosperma* Bertero ex Choisy in DC. Prodr. 9: 388. 1845.

Quamoclit repanda (Jacq.) G. Roberty, Candollea 14: 41. 1952.

COMMON NAMES. Liane patate, patate grand bois, patate rouge bord de mer (Guadeloupe); capi (Dominica); fleur rouge bois, patate grand bois (Martinique).

High climbing, glabrous twiner with tuberous roots. Petioles about half as long as leaf blades; blades ovate to cordate, up to 11 cm. long and 7 cm. wide, somewhat coriaceous, base truncate or cordate, apex obtuse or acuminate and mucronate, margins usually entire, occasionally 1 or 2 long, narrow lobes on either side at the base, the center lobe narrow, gradually tapering to the apex. Peduncles stouter and longer than subtending petioles; inflorescences with (1 to) several flowers in lax compound umbels tending to branch dichotomously; bracts linear, caducous; sepals subequal, ca. 6–7 mm. long, rounded, tinged the color of the corolla; corolla bright pink to cerise, the tube ca. 3 cm. long, curved, the limb completely lobed, reflexed, lobes 1.5–2 cm. long; stamens and pistil exserted. Capsule brown, ovoid, 10–12 mm. high, beaked, sitting in calyx, 4-valved, the valves lighter on the inside, 2-celled; seeds 4, black, with 2 rows of long, silky, brown hairs.

This description represents *Ipomoea repanda* var. *repanda*, found in the Lesser Antilles.

GENERAL DISTRIBUTION. Puerto Rico, Lesser Antilles.

DISTRIBUTION IN LESSER ANTILLES. Barbuda, Antigua, Montserrat, Guadeloupe, Dominica, Martinique, St. Lucia, St. Vincent, Bequia, Grenada.

It should be noted that in Puerto Rican specimens the leaves are narrower and the pedicels widen more gradually into the calyx.

Ipomoea repanda var. *microdactyla* (Grisebach) Powell, stat. nov.

Ipomoea microdactyla Grisebach, Cat. Pl. Cubens. 204. 1866.

This variety is native to Florida, the Bahamas, and Cuba. The change of status better reflects its close relationship with *Ipomoea repanda* var. *repanda* of the eastern Caribbean islands. Their flowers, inflorescences, and fruits are the same, except that in var. *microdactyla* the inflorescence is smaller, and the corolla shows more variation in the depth of lobing, sometimes showing almost none. The leaves of var. *microdactyla* are also more variable, ranging from entire to very deeply 5-lobed. Perhaps the fact that *I. repanda* var. *microdactyla* is considerably smaller than the other variety is partly due to habitat: var. *microdactyla* grows in sandy soils, while var. *repanda* is a high climber that often grows in forests.

16. *Ipomoea setifera* Poiret in Lam. Encycl. Méth. Bot. 6: 17. 1804.

Convolvulus ruber Vahl, Eclog. 2: 12. 1798.

Ipomoea breviflora G. F. W. Meyer, Primitiae Florae Essequeboensis, 100. 1818.

Convolvulus setifer (Poiret) Sprengel, Syst. Veg. 1: 597. 1825 [1824].

Calystegia setifera (Poiret) Meissner in Martius, Fl. Brasil. 7: 316. 1869.

Ipomoea lesteri Baker, Kew Bull. 64: 83. 1892.

Ipomoea assumptionis Britton, Ann. N. Y. Acad. 7(11): 170. 1893.

Ipomoea ruber (Vahl) Millsp. Field Mus. Publ. Bot. Ser. 2: 86. 1900, non *I. rubra* Murray, 1774.

Ipomoea ruber (Vahl) Millsp. var. *albo-flavida* Urban, Symb. Antill. 3: 345. 1902 (as *rubra*).

Ipomoea ruber (Vahl) Millsp. var. *palustris* Urban, *ibid.* (as *rubra*).

Ipomoea palustris Urban, *ibid.* 9: 423. 1925.

COMMON NAMES. Liane à faux, liane douce (Guadeloupe); coudrel (Martinique).

Trailing or twining herbaceous vine; stems with or without long, stiff, yellow hairs. Petioles shorter or longer than blades, sometimes tuberculate; blades usually sagittate with rounded lower lobes and blunt, mucronate apical lobe, sometimes cordate with entire margin, glabrous, the midrib up to 11 cm. long, with or without hairs. Peduncles thicker, shorter or longer than subtending petioles, bearing 2 large, boat-shaped, acuminate bracts; bracts 1.5–2 cm. long, surrounding an inflorescence of 1 to several flowers, each flower with a pair of bracts that persist until flower matures; pedicels 1–2 cm.; sepals unequal, caudate-acuminate, the outer ones ca. 2 cm. long, with prominent longitudinal veins, winged at the base, keels becoming more prominent and sometimes muricate with maturity; corolla rose colored, funnel shaped, 7–9 cm. long, the limb 5-pointed. Calyx surrounding and extending beyond capsule; capsule 4-valved, 2-celled; seeds 4, gray-brown, tomentose.

GENERAL DISTRIBUTION. Central America, tropical South America, West Indies, tropical Africa.

DISTRIBUTION IN LESSER ANTILLES. Guadeloupe, Dominica, Martinique, St. Lucia, St. Vincent.

17. *Ipomoea sphenophylla* Urban, Symb. Antill. 5: 474. 1908.

Glabrous climber. Petioles (10–)15 mm. long; blades (3–)7 cm. long and (1–)2 cm. wide, entire, oblanceolate or obtriangular, gradually sloping to the base, the apex truncate and retuse, mucronate. Peduncles 2–3 cm. long; inflorescence several- to many-flowered; pedicels (2–)3 cm. long; sepals 5–7 mm. long, subequal, chartaceous, apex rounded; corolla unknown. Capsule globose, 6–7 mm. in diameter, 4-valved(?); seeds 4 mm. long, dark brown, with long, light brown, woolly hairs on the margins.

GENERAL DISTRIBUTION. Endemic to St. Eustatius.

Only two collections of this plant have been recorded (both from Signal Hill), neither of which has been seen by this writer.

18. *Ipomoea stolonifera* (Cyr.) J. F. Gmelin, Syst. Nat. ed. 13. 2: 345. 1791.

Convolvulus stoloniferus Cyr. Pl. Rar. Regni Neapol. 1: 14. t. 5. 1788.

Convolvulus littoralis L. Syst. Nat. ed. 10. 924. 1759.

Convolvulus arenarius Vahl, Symb. Bot. 1: 18. 1790.

Convolvulus repens Sw. Obs. Bot. 64. 1791.

Convolvulus acetosaefolius Vahl, Eclog. 1: 18. 1796 [1797].

Ipomoea stolonifera (Cyr.) Poiret in Lam. Encycl. Méth. Bot. 6: 20. 1804.

Ipomoea carnososa R. Br. Prodr. 485. 1810.

Ipomoea acetosaefolia (Vahl) R. & S. Syst. Veg. 4: 246. 1819.

Ipomoea arenaria (Vahl) R. & S. *ibid.* 247.

Ipomoea littoralis (L.) Boiss. Fl. Orient. 4: 112. 1875, non Blume, 1825.

COMMON NAME. Liseron blanc (Guadeloupe).

Seashore plant with wrinkled stems creeping in sand, rooting at nodes, occasionally climbing bushes; glabrous, a few patent hairs occasionally at nodes or tops of petioles. Petioles 0.5–10 cm. long; blades somewhat thick, usually simple, oblong, 2–13 cm. long, 0.5–4 cm. wide, usually twice as long as wide, the apex emarginate, mucronate, the base shortly attenuate but varying to cordate, hastate, or even lobed. Peduncles usually as long as petioles, bearing 1 (to 3) flowers; pedicels stouter and longer; bracts small; sepals equal or with 2 outer ones shorter, oblong with mucronate apex, ca. 15 mm. long in flower, becoming somewhat larger and usually purplish or purple spotted in fruit; corolla white, 4–5 cm. long. Capsule globose to conical depending on number of seeds, 4-celled, 4-valved; seeds (1–)4, with woolly hairs.

GENERAL DISTRIBUTION. Circumtropical.

DISTRIBUTION IN LESSER ANTILLES. Guadeloupe, Martinique, St. Lucia, St. Vincent.

19. *Ipomoea tiliacea* (Willd.) Choisy in DC. Prodr. 9: 375. 1845.

Convolvulus tiliaceus Willd. Enum. Pl. 1: 203. 1809.

Convolvulus fastigiatus Roxb. Hortus Bengal. 13. 1814, *nomen nudum*.

Ipomoea cymosa G. F. W. Meyer, Primitiae Florae Essequiboensis, 99. 1818.

Convolvulus essequibensis Sprengel, Syst. Veg. 1: 600. 1824.

Ipomoea fastigiata (Roxb.) Sweet, Hortus Brit. 288. 1827.

Ipomoea surinamensis Miq. Linnaea 18: 600. 1845.

Ipomoea alba Garcke, Linnaea 22: 66. 1848, non L. 1753.

Ipomoea longipes Garcke, *ibid.*

Ipomoea stenocolpa Garcke, *ibid.* 67.

Ipomoea batatas (L.) Lam. var. *fastigiata* Kuntze, Rev. Gen. Pl. 2: 442. 1891.

Ipomoea gracilis sensu auct., non R. Br.; House, Ann. N. Y. Acad. 18: 248. 1908.

COMMON NAMES. Wild potato vine (Dutch islands); liane douce, patate marron, patate bâtard, patate à cochon, patate sauvage (Guadeloupe); liane douce, patate sauvage (Martinique); wild slip, wild potato (Barbados).

Glabrous climber with slender stems, the older stems becoming striate, twisted, gray, and wiry on drying; roots sometimes tuberous. Petioles slender, about as long as blades; blades cordate or sagittate, occasionally dentate or lobed at the base; the midrib up to 14 cm. long, usually shorter, the petiole and veins sometimes red, the apex acuminate and mucronate, the base deeply cordate. Peduncles usually stouter and longer than subtending petioles; bracts small and caducous; inflorescence fastigiate; flowers few to many, sepals ca. 1 cm. long, with long, pointed apices very conspicuous in crowded, long and narrow buds, widening in flower, the inner ones much wider, all retaining the acuminate tips; corolla funnel shaped, pale lilac with dark purple center, 4–5 cm. long; anthers bearing microscopic glandular papillae. Capsule depressed-globose, beaked, brown, 2-celled, 4-valved, with sepals reflexed against pedicel; seeds 4 or fewer, smooth, brown-black; septum persistent.

GENERAL DISTRIBUTION. Tropical America, Polynesia, introduced in Old World tropics.

DISTRIBUTION IN LESSER ANTILLES. St. Martin, Saba, St. Eustatius, St. Kitts, Antigua, Montserrat, Guadeloupe, Marie Galante, Dominica, Martinique, St. Lucia, Barbados, St. Vincent, Bequia, Grenada.

This species, with conspicuous flowers, is a climber on trees and shrubs. According to Duss (Ann. Inst. Colon. Marseille 3: 437. 1897), it bears tuberous roots that are edible but that do not have the flavor of the sweet potato, *I. batatas*. The two species are so closely related that it is sometimes extremely difficult to determine herbarium material. The sweet potato is cultivated throughout the tropics; its stout, succulent stems run along the ground, sending down frequent roots which produce palatable storage organs, the tips of the stem turning upward. *Ipomoea batatas* also differs from *I. tiliacea* in sometimes being quite hairy and in frequently having palmately divided leaves. Its inflorescence is less conspicuous, smaller, more umbellate, and with coarser pedicels; herbarium material rarely has fruits, either because the plant rarely sets fruit, or because it seldom gets a chance to, the roots being harvested first. The ovaries and fruits usually have long, stiff hairs.

20. *Ipomoea tricolor* Cav. Ic. Descr. Pl. 3: 208. *t.* 5. 1795.

Ipomoea rubro-caerulea Hooker, Bot. Mag. 61: *t.* 3297. 1834.

Convolvulus rubro-caeruleus (Hooker) Dietr. Synopsis Pl. 1: 670. 1839.

Ipomoea puncticulata Bentham, Bot. Voy. Sulphur, 136. 1845.

Pharbitis rubro-coerulea (Hooker) Planchon, Fl. Serres 9: 281. *t.* 966. 1854.

Ipomoea violacea sensu auct., non L. 1753; Griseb. Fl. Brit. W. Indian Is. 469. 1862.

COMMON NAME. Liane douce (Guadeloupe).

Glabrous climber. Petioles shorter than, to twice the length of, blades; blades cordate, up to 14 cm. wide, basal sinus 2–3 cm. deep, midrib up to 12 cm. long, the apex pointed, mucronate. Peduncles usually longer and stouter than subtending petioles, producing few to several flowers; bracts minute; pedicels 2–3 cm. long; sepals equal, 3–5 mm. long, triangular, acute, green with white edge; corolla blue, funnel shaped, up to 7 cm. long. Capsule conical, ca. 1 cm. tall not including the long beak that falls off at dehiscence, 2-celled, 4-valved; seeds 4, black, pilose.

GENERAL DISTRIBUTION. Tropical America; and widely cultivated.

DISTRIBUTION IN LESSER ANTILLES. St. Martin, Saba, Antigua, Guadeloupe.

See *Ipomoea macrantha* for note on *I. violacea*.

21. *Ipomoea triloba* L. Sp. Pl. 1: 161. 1753.

Ipomoea eustachiana Jacq. Obs. Bot. 2: 12. t. 36. 1767.

Ipomoea parviflora Vahl, Symb. Bot. 3: 34. 1794.

Convolvulus sloanei Sprengel, Syst. Veg. 1: 593. 1824.

COMMON NAMES. Liane purgative, petite patate marron (Guadeloupe, Martinique); petite liane douce (Martinique).

Light creeper or climber, glabrous or with few hairs on stems and leaves. Leaves deeply 3- (to 5-)lobed, main midrib 2–4 cm., middle lobe lanceolate or ovate, lower lobes deltoid or lobed; occasionally leaf entire. Peduncles stouter and sometimes longer than subtending petioles, bearing 1 to several flowers; pedicels often tubercled; sepals ca. 5 mm. long, unequal, acute, mucronate, ciliate and/or hirsute, especially below; corolla pink-purple, 2–3 cm. long, funnel shaped. Capsule globose, surrounded by enlarged calyx, ca. 5 mm. high, hirsute above, 4-valved, 2-celled; seeds 4, dark brown, smooth.

GENERAL DISTRIBUTION. Originating in tropical America; now widespread as a tropical weed.

DISTRIBUTION IN LESSER ANTILLES. St. Barts, St. Eustatius, St. Kitts, Antigua, Guadeloupe, Martinique, Barbados.

One specimen examined (*Stehlé 3674* (GH, US)) has particularly large sepals for this species, but without flowers it is unwise to presume that this is *Ipomoea trichocarpa* Ell. or any other related species that would be a new record for Martinique and the Lesser Antilles.

22. *Ipomoea turbinata* Lagasca, Gen. Sp. Nov. 10. 1816.

Convolvulus muricatus L. Mant. Syst. Veg. 44. 1767.

Ipomoea muricata (L.) Jacq. Pl. Rar. Horti Caes. Schoenbr. 3: 40. t. 323. 1798 [1803?], non Cav. 1799.

Ipomoea bona-nox L. var. *purpurascens* Ker-Gawler, Bot. Reg. 4: t. 290. 1818.

Calonyction muricatum (L.) G. Don, Gen. Syst. 4: 264. 1838 [1837?].

Calonyction longiflorum Hassk. Pl. Javan. Rar. 523. 1848.

Calonyction speciosum Choisy var. *muricatum* (L.) Choisy in DC. Prodr. 9: 345. 1845.

?*Convolvulus colubrinus* Blanco, Fl. Filip. ed. 2. 66. 1845.

Calonyction speciosum sensu Boldingh, Fl. Dutch W. Indian Is. 163. 1909, non Choisy, 1834.

COMMON NAME. Lilac bell (St. Eustatius).

Well-branched, glabrous vine with recurved prickles or warts on stems and often on peduncles, sometimes on petioles. Petioles shorter or longer than midribs, up to 10 cm. or more; blades entire or 3-lobed, apex acuminate and mucronate, base deeply cordate. Peduncles heavier and usually shorter than subtending petioles; flowers 1 to few; bracts small, falling very early; pedicel(s) thickened above; sepals ca. 1 cm. long, unequal, keeled on the midrib, awned, the awns usually flaring outward; corolla 5–8 cm. long, funnel shaped, with a narrow tube, lilac to purple, open at night, closing early in the day; stamens and pistil scarcely exerted. Pedicel thickening and becoming retrorse in fruit; capsule conical, 1.5–2 cm. high, beaked, dehiscent, 4-valved, 2-celled; seeds 4, brown, smooth.

GENERAL DISTRIBUTION. The tropics; sometimes cultivated.

DISTRIBUTION IN LESSER ANTILLES. St. Eustatius.

23. *Ipomoea walpersiana* Duchassaing ex Urban, Symb. Antill. 3: 345. 1902.

Glabrous vine; stems more or less 3- or 4-angular. Petioles 4–9 cm. long; lower leaves triangular with subtruncate base, 7–9 cm. broad, 6–8 cm. long, apex acuminate; upper leaves narrowly ovate or ovate-triangular, gradually narrowing to apex, base broadly cordate, lobes spreading, 3.5–5 cm. broad, 5–7 cm. long, margin entire. Peduncles 3–15 cm. long; corymbs several- to many-flowered; pedicels 15–20 mm. long; bracts ovate, (1–)1.5 mm. long; sepals glabrous, very unequal, outer ones 4–6 mm. long, inner ones 7.5–8 mm. long, all apices rounded; corolla purple, 5 cm. long, narrowly funnel shaped, 8 mm. wide above the middle (herbarium material); ovary 2-celled, ovules 4. Capsule globose, 10–12 mm. in diameter, 4-valved; seeds brown-black, velvety, with long, patent, white hairs on the margin except at the base.

GENERAL DISTRIBUTION. Endemic to Guadeloupe.

The above information was taken from the original description and from Fournet (1978). Only two collections of this species have been recorded.

24. *Ipomoea wrightii* Gray, Synopt. Fl. N. A. II. 1: 213. 1878.

Ipomoea pulchella sensu auct., non Roth, 1821; Griseb. Fl. Brit. W. Indian Is. 470. 1862.

Convolvulus heptaphylla Roxb. Fl. Indica 2: 66. 1824, non Rottler & Willd. 1803.

Ipomoea heptaphylla sensu auct., non Voigt, 1845; Britton & Wilson, Sci. Survey Porto Rico Virgin Is. 6: 114. 1925.

Ipomoea spiralis House, Muhlenbergia 3: 40. 1907 (as *spirale*).

COMMON NAME. Patate marron (Guadeloupe).

Slender twiner, almost completely glabrous. Leaves palmately compound, petioles longer than leaf blades; leaflets 5, membranous, one or more frequently lobed, middle one not usually conspicuously longer than others, leaflets and lobes lanceolate to ovate, obtuse or acute, each with apex usually mucronate and base cuneate. Peduncles filiform and wavy, shorter than the subtending petioles, twisting to place the flower beyond the shadow of the blade, occasionally tomentose toward the upper end; bracts very small; pedicels much shorter and sturdier than peduncles, ca. 1 cm. long; calyx shorter than pedicel, the sepals rounded, accrescent, turning completely backward as fruit matures; corolla lilac, ca. 2 cm. long. Capsule globose, 2-celled, splitting irregularly, exposing the persistent, transparent septum; seeds 4 or fewer, with long, cottony hairs, clinging to the remains of the fruit for an indefinite period.

GENERAL DISTRIBUTION. Tropical America.

DISTRIBUTION IN LESSER ANTILLES. Antigua, Guadeloupe, Barbados.

One specimen examined had more than one flower per peduncle.

This plant species, with the distinctive spiraling of its filiform peduncle, is not to be confused with *Merremia quinquefolia*, which it resembles. It seems to have been the plant that appeared spontaneously in the Calcutta garden and that was described under the name of *Convolvulus heptaphylla* by Roxburgh.

9. *Stictocardia* Hallier f. Bot. Jahrb. 18: 159. 1893.

Climbers, usually pubescent. Leaves ovate to orbicular, with minute glands on the lower surface of the blade, margin entire. Peduncles axillary, bearing 1 to many flowers; bracts small, caducous; sepals more or less equal, rounded at the apex; corolla large, funnel shaped, pink, red, or purple; stamens and pistil included; pollen spiny. Calyx becoming much enlarged and coarse in fruit, completely surrounding the indehiscent, 4-celled fruit; seeds 4, brown, pubescent, freed by disintegration of calyx and pericarp.

TYPE SPECIES: *Stictocardia tiliifolia* (Desr.) Hallier f.

Stictocardia tiliifolia (Desr.) Hallier f. Bot. Jahrb. 18: 159. 1893 (as *tiliaefolia*).

Convolvulus tiliaefolius Desr. in Lam. Encycl. Méth. Bot. 3: 544. 1792.

Ipomoea tiliaefolia (Desr.) R. & S. Syst. Veg. 4: 229. 1819.

Convolvulus gangeticus Roxb. Fl. Indica 2: 46. 1824.

Ipomoea pulchra Blume, Bijdr. Fl. Ned. Indië, 716. 1826.

Rivea tiliaefolia (Desr.) Choisy, Mém. Soc. Hist. Nat. Genève 6: 407. 1834.

Argyreia tiliaefolia (Desr.) Wight, Ic. Pl. Indiae Orient. 4(2): 12 (as *tillae-folia*). t. 1358 (as *tilifolia*). 1848.

Rivea campanulata sensu House, Muhlenbergia 5: 72. 1909.

Strictocardia campanulata sensu Merr. Philip. Jour. Sci. Bot. 9: 133. 1914.

Argyreia campanulata sensu Alston in Trimen, Handb. Fl. Ceylon, Suppl. 201. 1931.

COMMON NAMES. Liane gros boudin, liane gros marron, bois-patate marron (Guadeloupe); gros boudin, liane d'argent bâtard (Martinique).

Stout climber, pubescent or glabrous. Petioles usually longer than blades; blades large, ovate to orbicular, lower surface covered with numerous black or brown dots (sometimes hidden by pubescence), pubescent at least along veins, midrib up to 17 cm. long, apex rounded to acuminate, base cordate but usually slightly cuneate within basal sinus, margin entire. Peduncles shorter than subtending petioles, bearing 1 or occasionally more flowers; sepals ca. 1.5 cm. long, unequal in width, the outer 2 surrounding the others, all rounded, subcoriaceous, with thin edges, pubescent or glabrous, with glands as on the lower surface of the leaf; corolla rose colored with purple center, funnel shaped, ca. 9 cm. long, portions exposed in bud bearing glands and having hairs at tips. Capsule ca. 2 cm. high, 4-celled, brown, beaked, chartaceous, indehiscent, surrounded by the coarser, much enlarged, spongy, conspicuously nerved sepals; seeds 4, brown, pubescent.

GENERAL DISTRIBUTION. The tropics.

DISTRIBUTION IN LESSER ANTILLES. St. Eustatius, Antigua, Montserrat, Guadeloupe, Marie Galante, Dominica, Martinique, St. Lucia, Barbados, St. Vincent, Grenada.

The Linnaean species *Ipomoea campanulata* based on "Adamboe" illustrated in Rheede tot Draakestein's *Hortus Indicus Malabaricus* (11: 115. t. 56. 1692) has often been confused with this *Stictocardia*, but the illustration shows a plant in which the flowers are not usually solitary, the corolla is lobed, the venation is of a different pattern, and the fruit appears to be dehiscent.

10. *Turbina* Rafinesque, Fl. Tellur. 4: 81. 1838.

Climbers, glabrous or pubescent; leaves cordate with margins entire. Peduncles axillary; corolla funnel or salver shaped; pollen spiny; stigma biglobose, style 1, ovary bilocular, ovules 4. Capsule ellipsoid, circumscissile at the base, with sepals spreading at maturity, 1 seed usually developing.

TYPE SPECIES: *Turbina corymbosa* (L.) Raf.

***Turbina corymbosa* (L.) Raf. Fl. Tellur. 4: 81. 1838.**

Convolvulus corymbosus L. Syst. Nat. ed. 10. 923. 1759.

Convolvulus domingensis Desr. in Lam. Encycl. Méth. Bot. 3: 554. 1792.

Convolvulus sidaefolius H.B.K. Nov. Gen. Sp. 3: 99 (78 in folio ed.). 1818 [1819].

Ipomoea sidaefolia (H.B.K.) Choisy, Mém. Soc. Hist. Nat. Genève 6: 459. 1834.

Ipomoea burmanni Choisy in DC. Prodr. 9: 350. 1845.

Rivea corymbosa (L.) Hallier f. Bot. Jahrb. 18: 157. 1893.

Ipomoea antillana Millsp. Field Mus. Publ. Bot. Ser. 2: 84. 1900.

Ipomoea domingensis (Desr.) House, Muhlenbergia 3: 38. 1907.

Legendrea corymbosa (L.) Ooststr. Blumea 5: 355. 1943.

COMMON NAME. Christmas wreath (Barbados).

Perennial climber, mainly on low bushes, glabrous or minutely pubescent; stems green and terete when young, becoming gray and tending to have flattened sides with age. Petioles slender, usually shorter than blades; blades cordate, often gland-dotted, midrib up to 8 cm. long, apex obtuse to acuminate, margin entire. Peduncles axillary, borne on main stem and secund on short branches; inflorescences cymose, more or less corymbose; bracts small, caducous; young buds conical; sepals arising sharply from flattened base, elliptic, mucronate, green and thickened at base, thickness decreasing toward the apex, margins scarious, the outer 2 much shorter, the inner 3 ca. 1 cm. long; corolla white with dark red or purple center, 2.5–3 cm. long, funnel shaped; pollen very fine; ovary 2-celled, ovules 4. Capsule 8–10 mm. long, brown, smooth, thin walled, ellipsoid, beaked by thickened style base topped by short filamentous portion, sitting in distinct disc; seed(s) 1 (or 2), brown, pubescent; septum pushed to one side; dried fruit breaking away open-ended at the base, the wall subsequently splitting upward into 4 valves; calyx persisting outspread and stiff even after fruit is shed.

GENERAL DISTRIBUTION. Tropical America; introduced and naturalized in parts of the Old World tropics.

DISTRIBUTION IN LESSER ANTILLES. Nevis, Antigua, Montserrat, Guadeloupe, Martinique, St. Lucia, Barbados.

The fruit of this plant gives the appearance of being woody and indehiscent, especially because dehiscence into four valves occurs at the same time as or after the entire fruit wall is cut loose. The indurated style base holds the top of the capsule firmly together, but the walls are thin and brittle. When there is more than one seed developed, one or more in each locule, the fruit appears lobed on the outside.

CULTIVATED SPECIES

The following exotic species are often cultivated.

Argyreia nervosa (Burman f.) Bojer (*A. bracteata* sensu West Indian authors; syn. *A. speciosa* (L. f.) Sweet). COMMON NAMES: liane d'argent, liane à tonnelle, liane de soie, liane à vonvon (Guadeloupe and Martinique); elephant climber (Barbados).

Evolvulus tenuis Martius ex Choisy subsp. *longifolius* (Choisy) Ooststr. (*E. bocasanus* Britton). (Under this name van Ooststroom (1934) cited a specimen from St. Kitts, doubtless the same one recorded by Grisebach as *Evolvulus villosus*). COMMON NAME: lin (Guadeloupe, St. Barts).

Ipomoea batatas (L.) Lam. Locally grown sweet potato (patate douce), an important food item throughout the area.

Ipomoea carnea Jacq. subsp. *fistulosa* (Martius ex Choisy) Austin. COMMON NAMES: ológi di anochi (St. Eustatius, St. Martin); petite campanule (Guadeloupe).

Ipomoea carnea has been reported as cultivated in St. Vincent (Guilding, 1825), and there is the possibility that this was the climbing subsp. *carnea*.

Ipomoea horsfalliae Hooker (*I. pendula* sensu Duss). COMMON NAME: liane rouge à tonnelles (Guadeloupe and Martinique).

In the United States National Herbarium (US), there are three sheets of a specimen (*Fairchild 2768 a, b, c*) collected in St. Lucia in 1932. They bear the following note: "A bona fide seedling from the true *Ipomoea horsfalliae* *Briggsii* vine on Government House, St. Lucia. . . . Mrs. Doorly, wife of the Administrator, planted a few seeds of this vine herself and got a seedling quite distinct from it, which appears to be a . . . reversion to wild type, smaller fl[ower]s and more distinct petals. It appears to be the same as a wild form found along the road to Mr. Knowlton's place, Empire Road, Dominica." As David Fairchild observes, the specimens show a clear resemblance not only to the Jamaican and Puerto Rican species, *I. horsfalliae* Hooker (in Curtis's Bot. Mag. 61: t. 3315. 1834), but also to *I. repanda*, which occurs in St. Lucia, Dominica, and throughout the West Indies except Jamaica, and which is, without a doubt, the plant Fairchild saw in Dominica. There seems little question that the garden plant was the hybrid, *I. horsfalliae* × *I. repanda*.

The coloring is like that of both species. It shows progression in leaf-lobing from 3- to weakly 7-lobed. The inflorescence is a dichotomous, very lax corymb; each flower has a slightly curved, cylindrical corolla tube, 3 cm. long and 6–9 mm. wide, with the limb 1 cm. long and lobed for its entire length, the pistil and stamens exerted. The flowers and inflorescence are exactly like those of a robust *Ipomoea repanda*. Flowers of *I. horsfalliae* have corolla tubes slightly longer than those just described, but twice as wide and distinctly narrowing at the base; the limb is only slightly lobed, and the leaves are not just lobed, but definitely palmately compound with 5 leaflets.

Herbarium material often inaccurately labeled *Ipomoea horsfalliae* (cult.) and collected throughout the tropics is mostly of similar hybrid material with lobed leaves and narrow-tubed flowers, scarcely to deeply lobed. Perhaps the cultivated var. *briggsii* is this hybrid.

Porana paniculata Roxb. COMMON NAMES: Chinese lace, white coralita

(St. Eustatius, St. Martin); muguet (Guadeloupe, Martinique); white coralilla (Barbados).

In addition, several native or naturalized species described in the text, including *Merremia tuberosa*, *M. umbellata*, *Operculina ventricosa*, *Ipomoea alba*, *I. cairica*, *I. nil*, *I. quamoclit*, and *I. repanda*, are cultivated.

The following convolvulaceous plants were growing in the botanic gardens of St. Vincent and Martinique in the early nineteenth century. Apart from the species mentioned before in this paper, none of the introduced taxa seems to have survived.

a.) From "Catalogue of Plants in His Majesty's Botanical Garden in the Island of St. Vincent, September 24, 1806" (Guilding, 1825):

COMMERCIAL AND MEDICINAL: *Convolvulus jalapa* [*Ipomoea jalapa*], *C. turpethum* [*Operculina turpethum?*].

ESCULENTS: *Convolvulus batatas* [*Ipomoea batatas*], *C. esculentus* [*Ipomoea batatas*].

MEDICINAL: *Convolvulus brasiliensis* [*Ipomoea pes-caprae* subsp. *brasiliensis*].

EXOTICS, CURIOUS OR ORNAMENTAL: *Convolvulus speciosus* [*Argyrea nervosa*], *C. maximus* [*Ipomoea maxima*], *C. malabaricus* [*Argyrea malabarica?*], *C. maculatus* [?], *C. bicolor* [*Hewittia sublobata*; naturalized in Jamaica], *C. flavus* [*Merremia umbellata* or *M. hederacea*], *C. parviflorus* [*Jacquemontia verticillata*, *J. paniculata*, or *Convolvulus siculus*], *C. quinquefolius* [*Merremia quinquefolia*], *C. pentaphyllus* [*Merremia aegyptia*], *C. dissectus* [*Merremia dissecta*], *C. repens* [*Ipomoea aquatica*, *I. stolonifera*, *Calystegia sepium*], *C. martinicensis* [*Aniseia martinicensis*], *Ipomoea repanda*, *I. carnea*, *I. bona nox* [*I. alba*], *I. filiformis* [*Jacquemontia solanifolia*], *I. coccinea* [*Ipomoea hederifolia?*], *I. speciosa* [*Argyrea speciosa*], *I. umbellata* [*Merremia umbellata*], *I. tuberosa* [*Merremia tuberosa*], *I. macrophylla* [?], *I. grandiflora* [*I. macrantha*], *I. Quamoclit*, flor. coccineis [*I. quamoclit*], *I. Quamoclit*, flor. albis [*I. quamoclit*].

b.) From "Catalogue des Plantes cultivées au jardin botanique et de naturalisation de la Martinique, année 1829" (Delhorme, 1830):

CONVOLVULUS	LISERON	
grandiflorus	grandiflore	[<i>Ipomoea alba</i> , <i>Operculina ventricosa</i>]
corymbosus	à corymbe	[<i>Turbina corymbosa</i>]
batatas	patate	[<i>Ipomoea batatas</i>]
dissectus	disséqué	[<i>Merremia dissecta</i>]
martinicensus	de la Martinique	[<i>Aniseia martinicensis</i>]
IPOMOEAE	QUAMOCLIT	
coccinea	écarlate	[<i>Ipomoea hederifolia?</i>]
quamoclit	à feuilles ailées	
repanda	ipomée	

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DEPARTMENT OF BOTANY
NATIONAL MUSEUM OF NATURAL HISTORY
SMITHSONIAN INSTITUTION
WASHINGTON, D. C. 20560